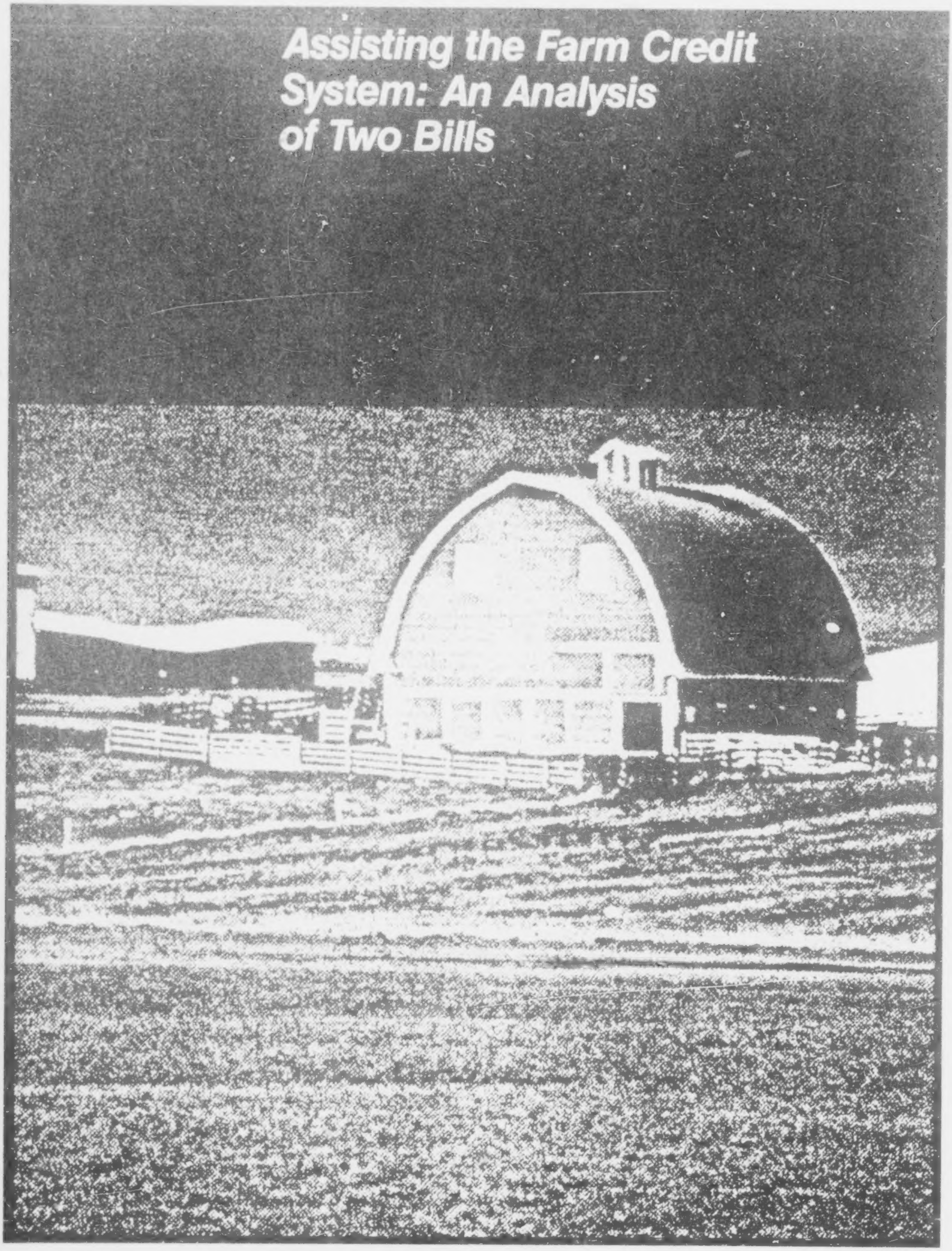
CONGRESS OF THE UNITED STATES
CONGRESSIONAL BUDGET OFFICE

DECEMBER 1987

Assisting the Farm Credit System: An Analysis of Two Bills



SPECIAL STUDY

J932-34

ASSISTING THE FARM CREDIT SYSTEM: AN ANALYSIS OF TWO BILLS

The Congress of the United States
Congressional Budget Office

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Washington, DC 20402

PREFACE

The Farm Credit System is the nation's largest agricultural lender. Unless federal assistance is forthcoming, it will face a serious financial crisis in the near future. In response to a request by the Senate Budget Committee, this paper analyzes the effects of bills to assist the Farm Credit System passed by the House of Representatives and the Senate Committee on Agriculture. In keeping with the mandate of the Congressional Budget Office (CBO) to provide objective analysis, this report makes no recommendations.

This paper was written by David D. Trechter of CBO's Natural Resources and Commerce Division, under the supervision of Everett M. Ehrlich. Valuable comments were provided by Peter H. Fontaine, Roger E. Hitchner, and Christine M. Ross of the CBO, William Jeffrey Shipp of the Farm Credit Council, David Freshwater of the Joint Economic Committee, and Kris Allen of Resources for the Future. The manuscript was edited by Francis Pierce, typed by Gwen Coleman, and prepared for publication by Kathryn Quattrone.

Edward M. Gramlich
Acting Director

December 1987

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SUMMARY

The Farm Credit System (FCS), the nation's largest institutional lender to the agricultural sector, is in severe financial trouble. Federal assistance will be required if a crisis induced by the failure of some portions of the system is to be avoided. Such a crisis would adversely affect the agricultural sector and could spill over into other capital markets, particularly those served by other government-sponsored lenders such as those in the housing sector.

THE GENESIS OF THE PROBLEM

The problems of the FCS have arisen from a number of sources, among the most important of which are:

- Falling agricultural land values that have necessitated a dramatic increase in loan loss reserves, leading to an equally dramatic fall in the system's income;
- An unfortunate timing of bond sales in the late 1970s and early 1980s that left the system with a high cost of funds;
- A rapid expansion in the system's loan portfolio caused in part by more liberal lending practices; and
- An increase in the volume of nonaccrual loans resulting from a very weak farm economy.

In short, both internal mistakes and the impact of general economic factors have left the FCS at the brink of insolvency.

ACTIONS NEEDED TO RESTORE THE FCS

Efforts to rescue the FCS have focused on three goals that most observers consider of central importance:

- Short-term system recapitalization;
- Institutional flexibility;
- Long-term viability.

System Recapitalization

Probably the most important short-term goal is to recapitalize the FCS--that is, to increase the collateral and equity in the system. By statute the FCS must have sufficient collateral, principally composed of performing loans, cash and investments, and the current market value of acquired property, to back all bonds and notes fully. In addition, it must have equity greater than zero, where equity consists of earned surplus and borrower capital. Failing to meet either of these conditions would preclude an institution from participating in system-wide bond issues. An institution incapable of issuing bonds would face liquidation, receivership, or conservatorship. The system also shares what is called "joint and several liability," meaning that the liabilities (notes and bonds) of one institution are ultimately the responsibility of all institutions within the FCS. Thus, if one bank is declared to be insolvent, the other institutions must satisfy the failing bank's obligations to its bondholders. Currently, two district-level institutions within the system have nearly exhausted their collateral. The equity position of parts of the system is also precarious: at the end of the third quarter of 1987, the Federal Land Banks had a total surplus of -$0.4 billion. Banks with negative equity have been able to continue operations only because the more liberal Regulatory Accounting Practices adopted in 1986 allow them to postpone recognition of certain expenses. Thus, the ability of the system to absorb additional losses is limited.

Institutional Flexibility

The country's financial system is becoming increasingly integrated and complex. At the same time, the laws governing banking in the United States may be revised in ways that will make banking more competitive. The FCS will have to meet this competition without losing sight of its mission. In weighing current legislation, two questions relating to the evolutionary flexibility of the system are of importance.

The first is whether the legislation will enable the FCS to respond to unforeseen market pressures.

A second issue concerns the balance between the social mission of the FCS (a cooperative dedicated to enhancing farmers' control over their supply of credit) and its commercial imperative (the need to be profitable). Both the House and the Senate bills seek to extend farmers' control over their supply of credit under the rubric of borrowers' rights. Two factors to be considered with respect to borrowers' rights are the equitability of providing FCS borrowers with rights not granted to all agricultural borrowers, and the impact of these new rights on the competitive position of the FCS.

Long-term System Viability and Access to Capital

The Congress has passed legislation dealing with the FCS's financial plight in each of the past two years. No one is anxious to make this an annual exercise. Therefore, both the House and the Senate bills contain provisions aimed at reducing the likelihood that federal assistance packages will be needed in future years. The ability of a lending institution to withstand a period of economic slowdown is directly related to its access to capital. This capital can be its own (for example, the capital reserves that commercial banks are required to maintain) or capital to which it has a claim (by virtue of an insurance policy or some other mechanism).

THE HOUSE AND SENATE APPROACHES TO THE PROBLEM

Both bills would provide sufficient assistance to recapitalize the system, though the forms of assistance would differ. The House would incur substantial outlays by appropriating such sums as may be necessary to enable the system to avoid insolvency. The Senate, in seeking to move most of the cost of assistance off the budget, would assist the FCS by means of government guarantees on bonds issued by the system, and provide direct payments tied to the interest expenses of these special bonds; only the direct payments would result in outlays in the early years of the program. This study estimates that in the absence of legislative changes in the structure or operations of the FCS, $2.8 billion will be needed between now and 1992 to avoid insolvency of any part of the FCS.

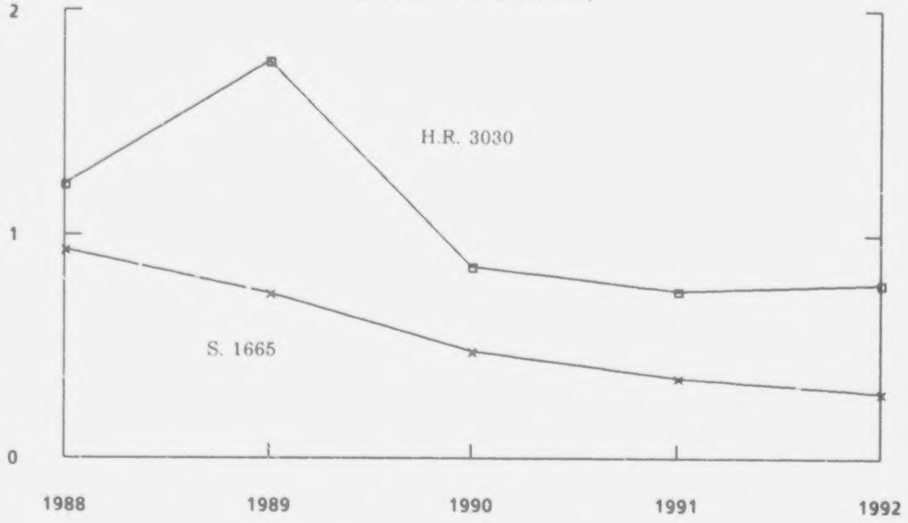
As shown in the Summary Figure, there is a basic trade-off between the cost of legislation and the financial condition of the FCS at the end of the projection period. The top panel in the figure shows the amount of assistance (either direct as in H.R. 3030 or indirect as in S. 1665) that would be provided to the system. The amount provided under the House bill would be substantially greater than that provided by the Senate bill. In the lower panel of the figure, the amount of earned surplus in the system during the period 1987 to 1992 is plotted for each bill. By 1992, the FCS would have more than twice as much earned surplus under the House bill as under the Senate bill ($6.2 billion under H.R. 3030 versus $2.8 billion under S. 1665). There is a direct correlation between the amount of money spent and the level of earned surplus in the FCS.

The House and Senate bills also address the issue of institutional evolution. Both would permit greater flexibility in merging and liquidating institutions within the system, though the rules governing these institutional changes could reduce the ability to exercise these options. The House bill would mandate a much more significant change in the structure of the system--elimination of the Federal Land Banks and Federal Intermediate Credit Banks. System restructuring could reduce the system's costs by $10 million to $40 million per year, which would reduce the cost of borrowing by between two and seven basis points.

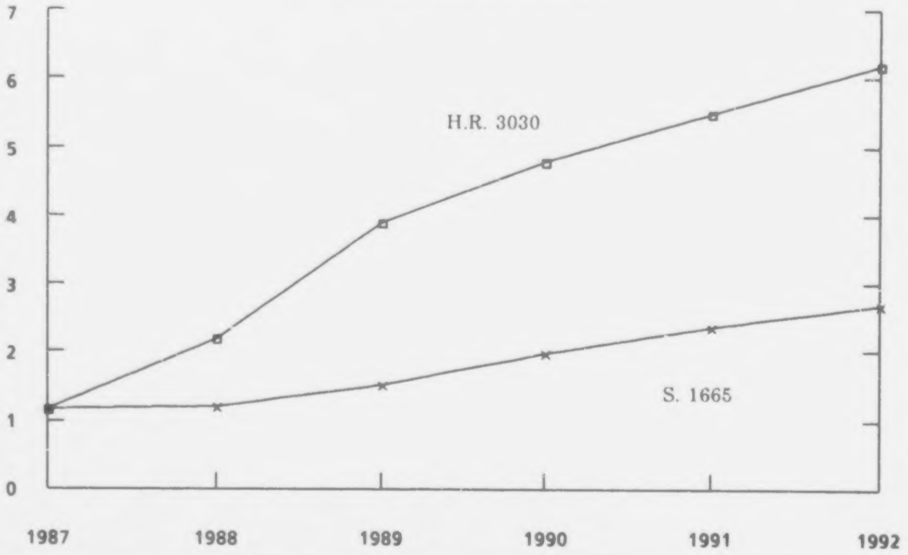
It will be very difficult to strike the proper balance between the social and economic missions of the FCS. The FCS is a cooperative, and a cooperative operates in a slightly different way than does the typical private corporation. A cooperative is owned by its patrons; profit maximization is a less immediate goal; and it is exempt from some of the antitrust rules governing other businesses. The FCS is also an agency lender--meaning that it has certain advantages in raising capital (for example, a partial tax exemption) that are provided by the government. Capital market participants appear to believe that

SUMMARY FIGURE. TWO MEASURES OF THE IMPACT OF H.R. 3030 AND S.1665

Estimated Expenditures Under H.R. 3030 and S. 1665
(In billions of dollars)



Farm Credit System Surplus Under H.R. 3030 and S. 1665
(In billions of dollars)



agency status means that FCS bonds are backed by an implied government guarantee, even though this is expressly denied by the FCS itself.

Because it is a cooperative, with a number of tangible benefits conferred upon it by the government, the FCS has had more of a social mission than would be expected from a typical lender. If the social mission becomes too costly, however, the FCS will cease to be a competitive source of capital for its members. If it cannot provide capital at a competitive rate, it will fulfill neither its economic nor its social mission. Both the Senate and the House bills expand the social role of the FCS, particularly in the area of borrowers' rights. Borrowers' rights raise a number of equity questions:

- Should FCS borrowers be given rights that other borrowers do not have?
- Is it fair to allow the terms of a contract to be rewritten after the fact?
- Should delinquent borrowers be rewarded by being allowed to renegotiate the terms of their loans?

To the extent that the costs of the FCS increase as a result of borrowers' rights, its competitive position will be eroded. This study estimates that the borrowers' rights in H.R. 3030 could increase the system's costs by up to $190 million per year, or approximately 35 basis points. Borrowers' rights in S. 1665 are somewhat less extensive--system costs could increase by up to $170 million per year or roughly 30 basis points.

In general, the House bill gives much greater weight to the issue of system recapitalization than does the Senate bill. The House bill would commit substantial public resources to an insurance program and to helping the system attain some yet-to-be-determined minimum capital level. The insurance program would increase the FCS's costs by about $80 million per year (or roughly 15 basis points). Minimum capital requirements would mainly affect the Federal Land Banks. The Land Banks might need nearly $900 million in order to meet these requirements, which if paid for by borrowers could add 200 basis points to the cost of borrowing. Other parts of the FCS would be less affected by the minimum capital requirements. The budgetary cost of the House bill would be substantial, in part because of its commitment to system recapitalization; the total cost is estimated by the study at $6.2 billion.

The Senate bill, in contrast, puts the same institutions in place but would not fund them through taxpayer contributions. Because these provisions of S. 1665 are either postponed or do not carry a penalty for failing to comply, they would have almost no impact on the cost of borrowing from the system. Since only direct payments to the FCS would be scored as outlays, the Senate bill would have a much smaller budgetary impact than H.R. 3030--totaling $0.8 billion over the next five years.

THE BUDGET ISSUE

Considering only their budgetary impact, the difference between the House and the Senate bills is substantial. In terms of the capital they would draw from capital markets, however, the difference between them is much less pronounced. The study estimates that the Senate bill would result in the sale of $3.1 billion worth of uncollateralized FCS bonds, which means this amount would be removed from the capital markets. The House plan would require the removal of $6.2 billion from national capital markets, still a substantially greater claim on resources than the Senate bill but a much smaller difference than suggested by their estimated budgetary costs. The practice of moving governmental functions off the budget, in the fashion of the Senate bill, obscures their real economic costs. It also reduces the meaning of the budget as a measure of government's claims on the country's resources.

CHAPTER I

INTRODUCTION

The Farm Credit System (FCS) is a complex, multi-tiered cooperative that is the largest single agricultural lender in the United States. In recent years the FCS has experienced severe financial problems, and in both 1985 and 1986 the Congress passed legislation to assist the system. During 1987 the prospects of the system have improved somewhat: in the second quarter of 1987, the FCS lost only $46 million and in the third quarter it had a positive net income of $4 million. This report examines the FCS's condition in light of the recent improvements and discusses a number of issues raised by pending legislation to assist the system.1/

AN UPDATE OF THE FCS'S FINANCIAL CONDITION

From the FCS's perspective, probably the most important change in the agricultural economy has been the leveling-off of land values. Because land values seem to be bottoming out, particularly in the Midwest, the system has not had to set aside large amounts for loan loss provisions. This, coupled with a slight increase in the volume and value of agricultural exports, relatively good liquidity among farmers (thanks in part to large federal outlays for agricultural programs), and record-high incomes for parts of agriculture (especially livestock producers), has reduced the estimated amount of federal assistance needed.

In 1986, the Congress allowed the FCS to substitute more permissive Regulatory Accounting Practices (RAP) for the standard, and more conservative, Generally Accepted Accounting Practices

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1. See Congressional Budget Office, *The Financial Condition of the Farm Credit System*, Staff Working Paper (July 1987), for an earlier analysis of the system's financial problems and past legislative efforts to deal with these difficulties.

(GAAP). RAP regulations permit the FCS to delay the recognition of a portion of certain costs (interest expenses and loan loss provisions) and therefore tend to understate the degree of financial stress in the system. A CBO study in July estimated that the FCS would need between \$4.5 billion and \$5.4 billion to avoid borrower stock impairment as measured using RAP.2/

Legislation currently being discussed would revoke or render irrelevant the RAP rules, implying that the required amount of federal assistance should be reestimated. This analysis considers the amount of assistance that might be needed to avoid impairment of borrower stock using the more conservative GAAP.

In the absence of any legislative changes in the mandate or structure of the FCS, this study now estimates that between \$2.4 billion and \$3.4 billion of federal assistance will be needed between 1987 and 1992 if the system is to avert borrower stock impairment under GAAP. No additional transfers between system banks are assumed to occur. The most likely amount of federal assistance needed is estimated to be \$2.8 billion. Since this is measured using GAAP rather than RAP, it implies that the projected financial performance of the FCS is much improved. Most of the improvement stems from much lower expectations regarding additions to loan loss provisions and new nonaccrual loans.

The bulk of the assistance will be needed in calendar years 1988 and 1989: between \$1.7 billion and \$2.0 billion. In large measure these transfers would offset losses that have heretofore been obscured by RAP. Virtually all of the assistance would be for the Federal Land Banks (FLBs), though the Federal Intermediate Credit Banks (FICBs) would receive a relatively small amount (less than \$0.1 billion over five years in the most likely case).

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2. Stock in the FCS is purchased by farmer borrowers as a condition of their borrowing. Impairing (or reducing the value of) that stock would mean that borrowers would share in the losses experienced by the FCS, a situation the Congress has attempted to prevent.

MAJOR LEGISLATIVE ISSUES

Pending legislation regarding assistance for the FCS has four general themes:

- Concern that perhaps the FCS needs to be reorganized;
- Efforts to ensure the stability of the supply of credit over the long term;
- Interest in borrowers' rights; and
- Methods of determining the amount, form, trigger point, and delivery mechanism for federal assistance to the FCS.

Restructuring the FCS

The push to reorganize the FCS comes from several sources: a concern about insufficient local input into decisionmaking, concern about the efficiency of the system, and concern about the long-term viability of the FCS.

Local Control. The concern about increasing local participation in decisionmaking, generally referred to as "local control," has some important historical roots. First, the borrower-owned FCS was designed to give farmers more control over their credit supply. There is a widely shared perception that some of this control has been eroded, first by the Farm Credit Administration, a powerful regulator that has not always remained at arm's length from management decisions, and second by the increasing prominence of the district banks. An example of the latter is the 1971 legislation that raised lending limits to 85 percent of the market value of the underlying collateral. Much of the push for this change came from the district banks, which justified the change on the basis of competitive pressures in the more liberal lending environment of the 1970s. Once the limits were raised, local associations were encouraged to use them. These more liberal lending practices are now seen as a major contributor to the system's current financial problems.

A second factor that has made local control a significant legislative issue is the belief that the FCS would like to increase the degree of centralization in the system. In a major study entitled *Project 1995*, the FCS concluded that in order to increase efficiency and assure the system's future competitiveness, a more top-down managerial approach was needed.3/ Since the publication of this study, the system has been actively disowning its conclusions. Nevertheless, some residual concern still exists as to the intentions of the FCS regarding its future structure.

System Efficiency. The efficiency of the system's structure has become a question because of its relatively high overhead expenses. In particular, the system's configuration has become an issue. Currently, the FCS has 12 districts with three banks in each (a Federal Land Bank, a Federal Intermediate Credit Bank, and a Bank for Cooperatives). Given the improvements in communications and transportation that have occurred since the FCS was founded, 12 districts and 36 district banks may not be the best organization for the times. The case for reducing the number of districts would be strengthened if some of the decisionmaking powers were taken from the district banks and given to local associations.

The Long-Term Supply of Agricultural Credit

The Congress has passed legislation dealing with the FCS and its financial problems in each of the past two years. The legislation being considered by the 100th Congress is intended to resolve these problems for the foreseeable future. Resolution of the FCS's problems could take at least two forms. One would be an effort to enhance the long-term viability of the FCS. For example, creating an insurance program and/or minimum capital requirements would strengthen the FCS by enabling it to cope with periodic downturns in the farm economy.

An alternative approach would be to focus on the flow of capital to agriculture rather than on the FCS per se. Currently, the FCS is a major channel through which funds flow to the farm sector from

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3. *Project 1995* (Denver, Colo.: Farm Bank Services, June 1984).

national capital markets. Its ability to raise capital at relatively favorable rates has enabled it to become the dominant institutional lender for agricultural real estate. Its dominance of this market, and the disruptions that would occur in the sector if it were to fail, are primary arguments for coming to the aid of the FCS. If other lenders increased the degree of competition in this market, there might be less need for Congressional intervention in the future.

Some of the proposed changes in the FCS's organization may not be mutually compatible. For example, efforts to increase local control may work at cross purposes with those aimed at improving the system's ability to deliver credit efficiently. There may also be a contradiction between reorganization and the overarching goal of minimizing the cost of assisting the FCS. Specifically, efforts to enhance the competitive position of non-FCS lenders in the real estate market could increase the cost of seeing the system through its financial problems.

Borrowers' Rights

In addition to the concerns about the distribution of power within the FCS, many people are worried about the relationship between the FCS and its borrowers. This concern stems in part from the disruptions in rural areas brought on by the recent downturn in the farm economy. The most potent symbol of that downturn is the farm auction following a foreclosure. Completion of a foreclosure generally results in the farm family losing its home as well as its business. The disruptions of a foreclosure for the farm family and for rural communities are considerable. Efforts to enhance borrowers' rights are aimed at making foreclosures a last resort in dealing with farm financial problems, and at minimizing the consequences of foreclosures that do occur.

Another aspect of the borrowers' rights debate focuses on how the burden of losses should be shared. The causes of the downturn in the farm economy are many and include factors internal to the farm economy (overexpansion by some farmers, an inflexible government agricultural policy, increased productivity) and several outside of it (changes in monetary policy, changes in trade policies, better-than-average weather in major producing areas). The financial consequences of the downturn are being shared by the government (through record-high farm program costs), lenders (through unprecedented losses and numerous bank closures), and farmers (through higher farm foreclosures). The campaign for borrowers' rights can be seen as a political judgment that the FCS should shoulder more of the adjustment costs.

The equity of borrowers' rights must be questioned. First, is it equitable to grant rights to those borrowing from the FCS while remaining silent vis a vis the rights of other private-sector borrowers? Second, is it equitable to redefine the terms of a contract between the FCS and a borrower after the contract has been signed and acted upon? Third, is it equitable to provide benefits to FCS borrowers who have not remained current on their loans while borrowers who do meet the terms of their contracts receive none?

Assistance for the FCS

While there is strong sentiment in favor of assisting the FCS, opinions differ as to how much assistance may be needed, when federal money should start flowing to the FCS, the form this aid should take, and the institutional safeguards that should be employed to ensure that federal assistance is used wisely. This debate has two major components. One focuses on the policy aspects of FCS assistance, the other on the budgetary aspects.

Policy Aspects of FCS Assistance.

Important issues of policy relate to how much federal assistance should be given to the FCS, what form that assistance should take, and when and how it should be given. The basic trade-off is between accountability and flexibility. The issues involved can best be illustrated by extreme examples. Flexibility would be maximized if the government simply gave the FCS unrestricted access to U.S. Treasury borrowing. The FCS would be free to make such changes in its structure and operating procedures as it saw fit, and could use the federal money to cover existing bad debt. This would give the FCS little incentive to find the least-cost solutions, and the government would have no leverage in demanding changes in the system.

The opposite extreme would be to take over the management of the FCS completely; to turn it into a second Farmers Home Administration (FmHA). In this way accountability for every federal dollar spent could be expected. The costs of such a strategy would be considerable, however. For example, there would be great pressure to prescribe national lending standards for what are a series of local markets (in order to provide every farmer with similar credit terms). In addition, there would be a danger of turning the FCS from a commercial entity into an instrument of social policy. Since the FmHA already fills many of the social roles that a governmentally controlled FCS might undertake, this seems redundant.

Budgetary Issues. Given the regularity with which the Congress has visited the FCS issue during the past three years, there is little inclination to pass legislation that would simply postpone the day of reckoning for the FCS for another year. But present circumstances--the size of the budget deficit, the possibility of sequestration under the Balanced Budget Act, and the spectacular growth in the agricultural budget during the last few years--all combine to put great pressure on those writing FCS legislation to minimize the budgetary impact of their bill. The upshot has been a considerable effort to move most of the cost of financial assistance off the budget, at least in the near term.

The advantage of moving the assistance package off the budget is obvious: it would reduce the need to cut other programs in order to pay for aid to the FCS. There are less obvious disadvantages to this approach, however: it would reduce still further the meaning of the budget as a statement of the cost of government, create potential future liabilities for the government, and set an unfortunate precedent for future assistance requests.

CURRENT LEGISLATIVE EFFORTS

The two major legislative vehicles for FCS assistance are H.R. 3030 and S. 1665 (a number previously attached to a bill introduced by Senators Melcher and Boren). Because the legislation is still evolving in both the House and Senate, the analysis in this report will, unless otherwise stated, be based on the texts as they stood at the end of October 1987. H.R. 3030 has already been passed by the House. As of the end of November, S. 1665 has been approved by the Senate Committee on Agriculture (but will be referred to in the remainder of this report as the "Senate bill").

Both of the bills address the three major themes identified above (system restructuring, borrowers' rights, and federal assistance) and have major areas of similarity. The bills differ in important respects, however. As regards system restructuring, the House bill goes much further than the Senate bill in authorizing, and in some cases mandating, changes in the organization of the FCS. For example, H.R. 3030 calls for the consolidation of the 36 district banks into no more than six Service Center Banks and one Bank for Cooperatives. With respect to borrowers' rights, the House bill is again more extensive, granting dispossessed borrowers the right to retain their houses and the land immediately surrounding them. Perhaps the most obvious difference between the two bills is in the way assistance is structured. The House bill authorizes the Treasury to purchase stock in the FCS in such sums as may be necessary to ensure the system's survival. The Senate bill, in contrast, authorizes the FCS to sell a special class of noncollateralized bonds. These bonds would carry a government guarantee, and assistance would be based on the amount of interest due on the bonds.

ORGANIZATION OF THE REPORT

Each of the major topics identified in this chapter will receive more extensive treatment in the chapters to follow. In Chapter II, the implications of the types of system restructuring proposed by the House and Senate bills will be discussed. The third chapter is devoted to an examination of the issues concerning the long-term supply of capital to agriculture. Chapter IV looks at the borrowers' rights provisions of the two bills. In Chapter V the many issues concerning assistance for the FCS are examined. Finally, Chapter VI looks at the overall cost of the two pieces of legislation and the difficult budgetary issues raised by the Senate proposal.

CHAPTER II

CHANGES IN THE ORGANIZATION OF THE FARM CREDIT SYSTEM

Current discussion of changes in the organization of the FCS focuses on two central topics:

- The operating efficiency of the system; and
- Borrower stock purchase requirements.

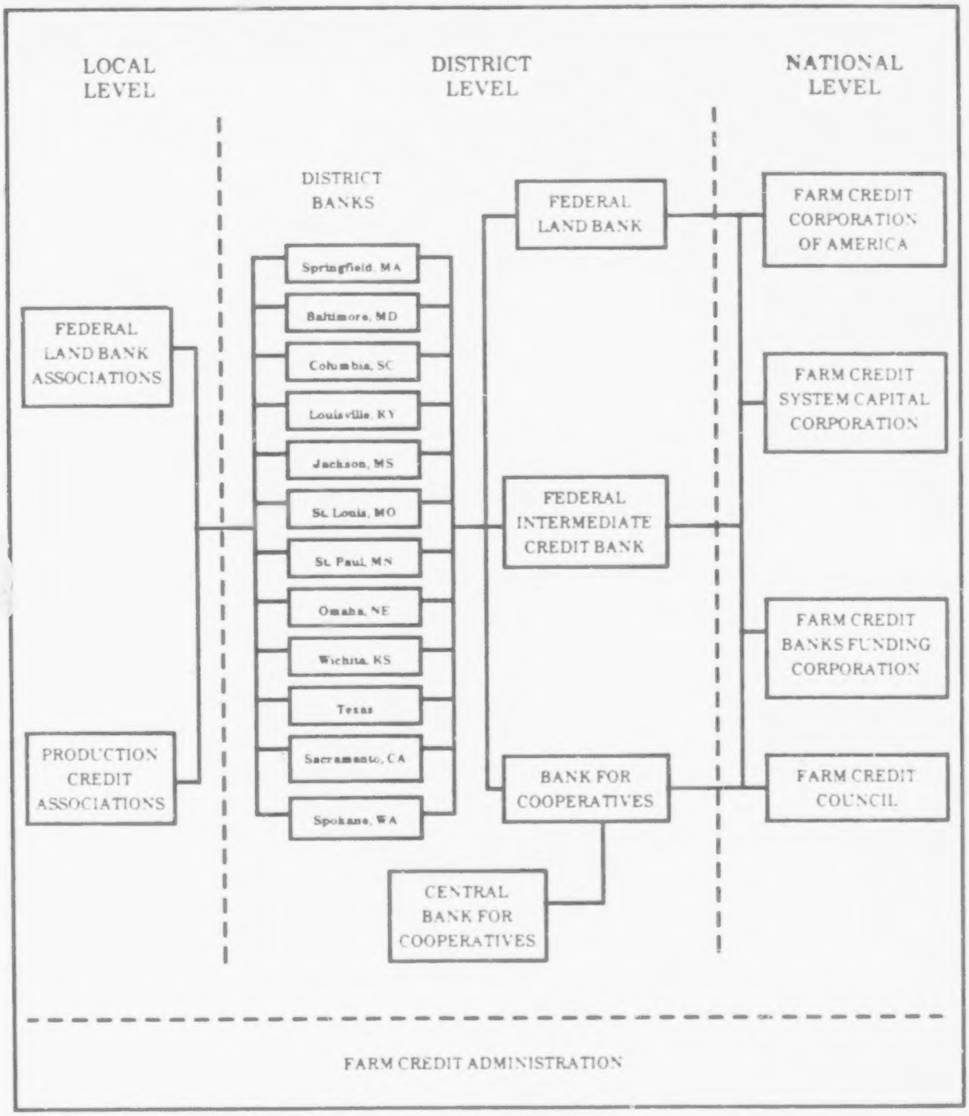
Proposals to improve operating efficiency have concentrated on consolidating functions and reorganizing responsibilities within the system. As an example of consolidating functions, both the House and the Senate bills would authorize the merging of Production Credit Associations and Federal Land Bank Associations so that both operating and real estate loans could be obtained from one office. In addition to improving efficiency, an underlying motivation for reorganizing responsibilities within the FCS is to increase the degree of local control over lending decisions.

Changes in borrower stock purchase requirements would affect the system's capital stock and could alter the cooperative character of the FCS. The immediate question regarding borrower stock purchase requirements is the degree to which borrowers should be held financially responsible for the financial problems of the FCS.

SYSTEM RESTRUCTURING

As shown in Figure 1, the FCS is a complex, three-tiered, cooperative. The first tier is composed of the approximately 150 Production Credit Associations (PCAs) and the 230 Federal Land Bank Associations (FLBAs). The principal function of PCAs is to provide short-term and intermediate-term loans for the production, processing, and market-

FIGURE 1. ORGANIZATION OF THE FARM CREDIT SYSTEM


LOCAL LEVEL
DISTRICT LEVEL
NATIONAL LEVEL
DISTRICT BANKS
Springfield, MA
Baltimore, MD
Columbia, SC
Louisville, KY
Jackson, MS
St. Louis, MO
St. Paul, MN
Omaha, NE
Wichita, KS
Texas
Sacramento, CA
Spokane, WA
FEDERAL LAND BANK ASSOCIATIONS
PRODUCTION CREDIT ASSOCIATIONS
FEDERAL LAND BANK
FEDERAL INTERMEDIATE CREDIT BANK
BANK FOR COOPERATIVES
CENTRAL BANK FOR COOPERATIVES
FARM CREDIT CORPORATION OF AMERICA
FARM CREDIT SYSTEM CAPITAL CORPORATION
FARM CREDIT BANKS FUNDING CORPORATION
FARM CREDIT COUNCIL
FARM CREDIT ADMINISTRATION

SOURCE: Congressional Budget Office.

ing of agricultural products. FLBAs are the conduit through which the FCS provides long-term financing for the purchase of agricultural land, equipment, and other long-lived assets.

The second tier consists of the Banks for Cooperatives (BCs), the Central Bank for Cooperatives, the Federal Intermediate Credit Banks (FICBs), and the Federal Land Banks (FLBs). Each of the 12 districts in the FCS has a BC, an FICB, and an FLB. The BCs lend to agricultural cooperatives involved in all aspects of the food production and distribution system. FICBs provide short- and intermediate-term credit, principally to the local PCAs in their districts. The FLBs make long-term loans secured by first liens on real estate to agricultural producers using the local FLBAs.

The final tier is composed of organizations that function at the national level. The Farm Credit Corporation of America is the principal policymaking body in the system and is responsible for implementing management and accounting procedures. The Farm Credit System Capital Corporation was created by the 1985 Farm Credit Act to provide assistance to financially stressed banks and associations within the FCS. The Federal Farm Credit Banks Funding Corporation sells system securities in national capital markets in order to generate the loanable funds needed by the system. The Farm Credit Council is an independent trade association that represents the interests of the FCS before the Congress and the Administration. The FCS also has an entity that offers leasing services. Finally, the Farm Credit Administration is the governmental agency responsible for regulating the FCS to ensure its safety and soundness.

The complexity of this structure has raised questions about the operating efficiency of the system, and about the relationships between the various parts of the FCS.

Operating Efficiency

Some critics suggest that the multilevel structure of the FCS is inefficient. One measure of operating efficiency might be a firm's return on assets (implying that if a firm was inefficient, it could not maintain a "normal" rate of return). Indeed, as shown in Table 1, the system's return on assets was relatively low in the early 1980s and has been negative during the past two years. But since cooperatives are borrower-owned and borrower-operated, they function somewhat differently than private firms. In a cooperative, profits in excess of the capital needs of the business are returned to the members as patronage refunds. Given the circularity of this transaction, the cooperative has an incentive to maintain a low profit margin (and hence, a low return on assets). For this reason, measures of profitability may not be the best gauge of the efficiency of a cooperative.

Another measure of efficiency might be operating expenses relative to gross loan volume, suggesting that the lower the ratio the more efficient the delivery of credit. Table 1 shows that net expenses from operations (operating expenses less other income) as a percentage of total loans has increased quite significantly during the 1980s, going from 0.3 percent in 1981 to 1.5 percent in 1986.

TABLE 1. SELECTED MEASURES OF FCS PERFORMANCE

	1981	1982	1983	1984	1985	1986
Total Loans (in billions of dollars)	78.7	81.4	81.9	79.8	69.8	58.2
Return on Average Assets (percent)	1.2	1.3	0.6	0.4	-3.4	-2.6
Net Expenses/ Total Loans (percent)	0.3	0.5	0.8	0.9	1.5	1.5
Allowance for Loan Loss/ Total Loans (percent)	1.8	1.8	1.7	1.7	4.6	6.2

SOURCE: Congressional Budget Office, from FCS annual reports.

However, if an institution has a relatively large volume of nonaccrual and other high-risk loans, an increase in operating expenses per dollar loaned would be expected. Such loans require much greater servicing efforts and result in higher overhead. One measure of a lender's perception of the relative riskiness of its portfolio is loan loss reserves as a percentage of total loans. Table 1 indicates that this ratio was quite stable until 1984 but has increased substantially since that time. Thus, at least a portion of the increase in operating expenses relative to loan volume is explained by the increased riskiness of the FCS portfolio.

In sum, there are legitimate concerns about the operating efficiency of the FCS. The importance of controlling operating expenses will be discussed below. But while the concern is justified, the correct performance measures of the system's operating efficiency are not obvious.

Local Control

Concern about the relationship among the various levels of the FCS focuses mainly on the degree of local control in the system. Increasing local control means that Production Credit Associations (PCAs) and Federal Land Bank Associations (FLBAs) would be given much greater latitude in determining lending policies, making fund-raising decisions, and establishing other aspects of daily operations. Currently, district banks make most of the decisions about bond sales to raise funds, the terms on loans, and operating procedures.

Advocates of increased local control argue that this would improve the ability of the FCS to serve its farmer-borrowers. One of the original goals of the FCS was to increase the control that farmers have over their supply of credit. Local participation in the decisions regarding loan applications and other aspects of the cooperative's business is an important factor in providing farmers with this control.

But increasing local control could undermine the national character of the FCS and conflict with the goal of increasing operating efficiency. The FCS is supposed to be a system, with shared interests and responsibilities. For example, one factor contributing to the ability of the FCS to raise money in capital markets at rates of interest close to those paid on Treasury bills is that bond buyers consider it to be a single entity. Joint and several liability--the clause that states that each system bank can be held financially responsible for the notes and bonds issued by all other banks--binds the FCS together and permits it to diversify geographically the risk associated with agriculture. Furthermore, as long as the FCS is considered to be a single entity, investors who purchase its bonds need only consider the financial condition of the system as a whole. If the unity of the FCS came into question, investors would have to examine the financial condition of the individual banks and associations participating in a given offering of FCS bonds. In addition to increasing the riskiness of FCS investments, such a change would increase the transaction costs for bond buyers by a substantial amount.

While an increase in local control would not inevitably and directly erode the cooperative character of the system, excessive decentralization could do so. For example, suppose a local association is given responsibility for all decisions regarding loans, bond sales on its behalf, and the distribution of its capital. Over a number of years it proves itself to be a prudent manager of its affairs, and prospers. It is then instructed to part with some of its capital in order to assist a local association in another state. It may never have heard of the other association, not know why it is having financial difficulties, and not know what measures have been taken to deal with the problems. It is an open question whether the financially sound association would comply with this capital assessment without seeking a release, presumably through the courts.

System Restructuring in Current Legislation

The Senate and House bills propose similar forms of system restructuring. Currently, some districts allow mergers between unlike associations (PCAs and FLBAs). Both bills would authorize these local mergers in all districts, permit mergers between banks at the district level--for example, between a Federal Land Bank (FLB) and a Federal Intermediate Credit Bank (FICB)--and allow associations and banks to join. Mergers would have to be approved by the Farm Credit Administration (FCA), a majority of stockholders (the farmer-borrowers), and the relevant boards of directors. The House bill requires the appointment of non-FCS personnel to the boards of directors of the various system entities. These outside directors should provide a broader range of opinions when questions of system policy are being discussed.

There are some differences between the two bills with respect to system restructuring. For instance, in the Senate bill the FCS is authorized to charge origination fees. These fees are designed to offset in part the capital that would be used if borrower stock purchase requirements (to be discussed in the next section) are reduced or eliminated. The House bill makes no mention of origination fees. Undoubtedly the biggest difference between the two pieces of legislation is contained in Title 4 of the House bill. In this title, the FLBs and FICBs are required to apportion their assets, liabilities, and capital to the FLBAs and PCAs in their districts. District banks would be eliminated in the House bill. In their place, the House bill creates no more than six Service Center Banks. The Service Center Banks are proscribed from establishing loan pricing or approval policies and are to concentrate on providing such services as accounting, coordination of funding requests, and other unspecified "non-lending and non-management services" at the request of the associations.

Implications of System Restructuring

The underlying question regarding the need for organizational change in the FCS concerns the extent to which current financial difficulties are the result of operating inefficiencies. While it is difficult to apportion responsibility for the financial difficulties facing the FCS among the various contributing factors, much of it must be assigned to general economic factors and to less than perfect foresight. Few predicted the concerted effort made by the Federal Reserve Board to bring inflation under control, the dramatic increase in the value of the dollar, the fall in U.S. agricultural exports, the global economic slowdown, and the fall in agricultural land values. If macroeconomic events are the preeminent factor in explaining the system's current state of affairs, it is unlikely that changes in its structure will significantly improve its performance.

To be sure, the system acted in ways that, in retrospect, exacerbated its financial difficulties. For example, raising lending limits (to 85 percent of the market value of the underlying collateral), basing loan decisions on collateral values rather than the income-generating capacity of the land, and use of average cost pricing for loans all contributed to the system's current financial woes. However, with the exception of the use of average-cost pricing, other lenders in agriculture committed similar mistakes. The FCS, in general, did things the way other agricultural lenders were doing them but did more lending than others. Hence its problem is greater in magnitude.

The foregoing discussion is not meant to deprecate efforts to control expenses within the FCS. One indication of the importance of reducing system costs can be seen in the following comparison. In this paper's base-case estimate of the FCS's financial condition, operating expenses were assumed to fall by 5 percent per year. That scenario meant that $2.8 billion in assistance would be required to avoid borrower stock impairment. If operating expenses are assumed to remain at 1986 levels for the duration of the projection period, total assistance needed increases to $3.1 billion for the five-year period. Thus, controlling operating expenses is an important variable in determining the amount of assistance that the system will require, although this alone cannot return the system to profitability.

Impact of Mergers on the System. Expanding the authority to merge institutions within the FCS could have several beneficial consequences. Heretofore, the PCA/FICB, FLBA/FLB, and the Bank for Cooperatives (BC) have maintained separate financial identities and frequently different managerial organizations as well. The advantages of mergers include a possible reduction in overhead, the ability to provide borrowers with a comprehensive line of services in one location, enhanced ability to mobilize internal system resources to cope with financial problems, and an additional mechanism for ousting ineffective management. Mergers could be an indirect way of liberalizing geographic restrictions on lending operations.

Opponents of the merger provisions fall into two camps. On the one hand, there are those who argue that mergers will lead to more centralized management and less local control over lending decisions. For example, if all of the associations in a district merged together, local control might be less than under the current structure.

Others argue that the rules governing mergers are so strict that they would effectively eliminate them. The rules in both bills require that a majority of stockholders in the two institutions involved, voting on the basis of one person, one vote (as opposed to voting in proportion to the amount of stock held), must approve the merger. Such a level of support might be difficult to achieve. The inability to merge could have a particularly negative impact on the associations if this precluded attaining an efficient size of operations or if changes in banking laws enhanced the competitive position of other lenders (for example, by liberalizing the laws covering branch banking and multibank holding companies). In the short term, the very different financial conditions of the PCAs and the FLBs could make achieving majority votes for mergers even more difficult.

Title IV of H.R. 3030, as noted, goes a step beyond defining the rules for mergers by dismantling the district banks and creating Service Center Banks. Several consequences of this change should be considered. First, such a devolution of authority and responsibility would make failure of system institutions more acceptable from both the political and economic viewpoints. The district banks are multibillion-dollar institutions. A failure of a district bank could have significant, negative repercussions for the system and, conceivably, for capital markets more generally. In contrast, the failure of an association might have a significant impact on its local area but would be unlikely to foster additional uncertainty in national markets. Second, this change could also increase the probability of failure for system institutions. Local associations might not, for example, have the training and personnel to raise capital in the bond market efficiently. To the extent that this would increase the cost of funds for an association, its competitive position vis a vis other lenders would be eroded.

A third potential implication of the structural change called for in Title IV of H.R. 3030 concerns the relationship between the individual associations and the FCA. Currently, the district banks and the Farm Credit Corporation of America (FCCA) act as a sort of buffer between the associations and the FCA. Downgrading the power and status of the district banks would reduce the effectiveness of this buffer. The FCA has, in the past, been more than an arm's-length regulator by playing an active management role, for example, in approving or disapproving interest rates charged by banks or associations. To the extent that the FCA was given responsibility for overseeing the expenditure of government funds in an assistance package, the line between regulator and manager would become more blurred. As the sole regulator of a relatively large number of associations, the FCA might come to dominate the relationship, and thereby reduce the true extent of local control.

Budget Impacts of Restructuring. Because of the importance of macroeconomic factors in explaing the current financial problems of the FCS, changing its structure would not have a major impact on the cost of either the House or the Senate bill. This study estimates the efficiency gains from system restructuring under the House bill at $100 million over five years. Because the structure of assistance in the Senate bill is so different, a direct comparison of its system restructuring costs with those of H.R. 3030 is somewhat misleading (more will be said on this point in the chapter that discusses the assistance packages offered in the two bills). Given this precaution, the study estimates that system restructuring under the Senate bill would reduce assistance by perhaps $10 million over five years.

CHANGES IN BORROWER STOCK

The FCS is said to be a borrower-owned cooperative. Ownership is expressed through the purchase of borrower stock. Currently, when a loan is obtained from the FCS the borrower is required to purchase stock in the system. The amount of stock required is between 5 percent and 10 percent of the value of the loan obtained, and is included in the loan. For example, if a farmer wanted to borrow $100,000 from the FCS with a 10 percent borrower stock requirement, the size of the loan, if granted, would be $110,000. The interest would be paid on the full $110,000 borrowed.

Holding stock entitles the borrower to vote for candidates to the cooperative's board of directors and to a share of any patronage dividends issued by the institution. Stock is retired when the loan is repaid (in the above case, when the $100,000 is repaid). Historically, redemption has usually been at par, and borrower stock has not been viewed as a risky investment.

Two issues are involved in the debate over whether borrower-owners should shoulder any responsibility for the system's financial troubles. Borrowers from the FCS are loosely analogous to stockholders in a corporation in that both own equity shares in the institution. When a corporation fails, the shareholders receive only what is left after the creditors are satisfied. In short, their equity is at risk. A case can therefore be made that the holders of borrower stock should bear some of the cost of the FCS's financial difficulties. But there are two general arguments against holding borrowers financially responsible for the FCS's problems. First, since borrowers do not purchase stock voluntarily, they are not investors who have chosen to bear the risk associated with ownership. Second, the costless redemption of borrower stock is part of borrowers' expectations, and the risk of losing equity in the system would lead to more borrower flight and to greater difficulty in attracting customers for new loans, thus making the financial prospects of the system worse.

Borrower Stock Requirements in Current Legislation

Both the House and the Senate bills would reduce required borrower stock purchases on loans obtained five years after enactment--to one share of voting stock in the House bill and to voting stock equal to the lesser of 2 percent of the value of the loan or $1,000 in the Senate bill. The two bills treat existing borrower stock somewhat differently. In the House bill, existing stock can either be converted to new, at-risk stock, or can be redeemed to reduce outstanding debt. In the Senate's version, a portion of borrower stock must be converted to voting stock, and minimum or maximum stock purchases need not be required on new loans. Both measures guarantee redemption of borrower stock at par for the first five years after the bill is signed into law.

Impact on the System. Eliminating the stock purchase requirement would have several advantages. First, a significant political advantage is that its elimination would remove a major source of constituent complaints about the system. If farmer-borrower/voters did not have capital at risk, the failure of a system entity would be of less political significance. Second, elimination of the stock purchase requirement would force the system to report more accurately its capital position. Heretofore, borrower stock has been treated as system capital, even though few considered it to be truly at-risk equity. Treating current borrower stock as system capital significantly overstates the equity base in the FCS. Third, elimination of the requirement would facilitate the comparison of borrowing costs across lenders.

One disadvantage of eliminating borrower stock would be the potential impact on the functioning of a cooperative. In general, cooperatives have three distinct centers of power: the general membership, the board of directors, and the management. The general membership elects the board of directors who, in turn, hire and fire the team that manages the day-to-day business of the cooperative. To the extent that the members or the board of directors lose interest in the cooperative, an important oversight function is lost. The concern of those who would retain the borrower stock requirement is that the absence of a financial stake in the cooperative would diminish borrower participation in its affairs.

A second concern is that elimination of borrower stock requirements, along with other changes proposed by these bills, would change the character of the FCS. One of the salient characteristics of a cooperative is ownership by its patrons. Elimination of borrower stock would break this link. Further, creation of a new class of at-risk stock that would be offered to any interested investor would increase the similarity between the FCS and any large commercial bank. Finally, changes in the loan pricing policies followed by the FCS, in which financially stronger borrowers would receive a lower interest rate, would violate one tenet of the cooperative movement--the equal treatment of all members. (It should be noted that the Senate bill restricts the ability of FCS institutions to practice differential pricing.) Many of the benefits granted to the FCS under agency status were given because of its cooperative characteristics, and might not be appropriate if the FCS became a national agricultural bank.

Budget Impacts. Given the provisions of the House bill, virtually all borrowers could be expected to reduce their debt rather than convert existing stock to at-risk stock. This conclusion is based on the uncertain returns that would be associated with the new, at-risk stock. Redemption of stock would reduce the system's capital and its level of interest-earning loans. Thus, changing the treatment of borrower stock could be expected to increase the cost of the House bill by about $300 million over the next five years. In S. 1665, it is assumed that no new borrower stock would be issued except in the form of voting stock. As a result, this study estimates that changing borrower stock requirements would increase the cost of S. 1665 by about $25 million during the next five years.

CHAPTER III

LONGER-TERM FINANCIAL ISSUES

Operating losses during the past two and a half years have depleted most of the FCS's earned surplus. In addition, the changes in borrower stock requirements proposed by the House and Senate bills--discussed in the preceding chapter--would contribute to a continuing drain on the system's capital resources. Low levels of capital reduce the ability of the system to cope with the cyclical downturns to which the agricultural sector is prone. Because its capital resources are at a low level, there is some concern about the long-term viability of the FCS. The failure of all or a major part of the FCS would have significant negative repercussions for the supply of credit to agriculture.

The House and Senate bills address the issue of the agricultural sector's long-term supply of credit in two, potentially contradictory, ways: enhancing access to national capital markets and expanding the ability of the FCS to withstand financial shocks. One measure designed to ensure agriculture's access to national capital markets is a secondary mortgage market. Enhancing the longer-term viability of the FCS requires weighing alternative risk management strategies for the system--for example, establishing minimum capital requirements and an insurance fund.

SECONDARY MORTGAGE MARKETS

Secondary mortgage markets work as follows. The lender who makes the loan, typically called the originator, retains responsibility for a portion of the loan (10 percent, for example), and sells the remainder to an institution that bundles groups of loans into pools (known as the pooler). The 10 percent held by the originator is designed to deter originators from making poor-quality loans; the originator's investment is the first source of funds tapped in the case of default.

A pooler then provides the service of bundling together numerous relatively small loans. Pools reduce the transaction costs associated with selling bonds backed by these mortgages. In addition, to the extent that the individuals who took out the mortgages have different sources of income, pooling would reduce the aggregate risk. The pooler profits from a spread between the rates charged by the originator and those on the secondary market.

The seller of these mortgage-backed bonds provides "credit enhancement," which is essentially an assurance that interest and principal will be paid. This credit enhancement may be backed by privately acquired insurance or, as in the case of the FCS and other agency lenders, by an implied link to the federal government. The more direct and explicit the link to the government, the lower the interest rate associated with these securities.

Proponents of secondary markets for agricultural mortgages cite several advantages. First, agricultural real estate loans are long-term, relatively illiquid loans that some lenders are reluctant to make. Those in favor of secondary markets argue that by enabling lenders to sell a large part of these loans, the secondary market might increase the participation of non-FCS lenders, such as commercial banks, in this market. Many feel that the FCS, with nearly 40 percent of the agricultural real estate market, has become too dominant, and that a secondary market would increase the ability of other lenders to compete for these loans. Increasing competition in this portion of the agricultural credit market would benefit farmers. It is also suggested that in addition to shifting market shares, a secondary market might increase the total supply of credit available to the sector. Finally, such a market would enable a portion of the risk associated with financing agriculture to be transferred to the nonagricultural sector, in this case to the buyer of bonds backed by agricultural mortgages.

The major drawback associated with a secondary market for agricultural mortgages is that it would be unlikely to generate a large volume of business. First, agriculture already has a type of secondary market for agricultural loans in the FCS. Whether or not the secondary markets described in the House and Senate bills would be in direct competition with the FCS is unclear. Nevertheless, though the FCS only pools loans from other lenders in a very limited sense, and their securities are not explicitly backed by mortgages, it does provide the other services of a secondary market. Associations act as originators, district banks act as poolers, and credit enhancement is provided by the system's agency status. Thus, the sector already has access to national capital markets, and any new secondary market would have to compete with the FCS for a share of this business.

Second, secondary mortgage markets suffer from what is termed "prepayment risk," meaning that bonds backed by mortgages can be redeemed prior to maturity. In contrast, FCS bonds are "noncallable"; once issued, their forced redemption is impossible. Noncallable bonds enable the bond buyer to lock in an interest rate. It should be noted that much of the difficulty facing the FCS today can be traced to the fact that its bondholders locked in high rates of interest during the late 1970s and early 1980s. Again, the difference in the nature of bonds sold by the FCS and the secondary market would be expected to increase the cost of borrowing on a secondary market relative to the FCS. For example, during most of 1986, a period when the financial problems of the FCS were perhaps most severe, short-term FCS bonds carried lower rates of interest than similar bonds issued by the Federal National Mortgage Association (FNMA). Given that the overall risk associated with the housing market is substantially less than in the agriculture sector, one would expect bonds backed by agricultural mortgages to carry higher rates of interest than FNMA and, by implication, FCS bonds. In short, a secondary agricultural mortgage market would be likely to have a higher cost of raising capital than the FCS.

Third, recent or contemplated changes within the FCS would reduce the cost of borrowing from the system. The system is expected to adopt marginal cost pricing (as opposed to the average cost pricing it used in the past) and to provide lower rates to its best customers (instead of one rate for all cooperative members--a practice that the Senate bill would limit). This means that the best borrowers would be able to take advantage of the relatively low nominal rates of interest now available. In addition, if borrower stock purchase requirements were reduced or eliminated, borrowing from the FCS would become cheaper. All of these changes would increase the competitiveness of interest rates on regular Federal Land Bank loans for borrowers who would be likely to qualify for loans financed on the secondary market.

Fourth, because of the relative riskiness of agriculture, the underwriting standards for this market (for example, the maximum percentage financed by the lender) would need to be strict in order to gain investor confidence. But strict standards would limit the volume of business eligible for this market. Small loan volume reduces the efficiency of a secondary market by limiting the potential for pooling risks. An additional implication of strict underwriting standards is that, contrary to popular belief, a secondary market would not directly benefit farmers who are currently experiencing financial stress.

Even if the secondary market enjoyed some success, there are several disadvantages associated with this option. It is probable that a secondary market would work only with a fairly explicit government guarantee attached to its securities. A guarantee would create a contingent liability for the government that could increase expenditures in future years. Furthermore, a government guarantee, whether implicit or explicit, would affect the flow of credit between sectors of the economy. Credit flows would be affected because the guarantee would improve the risk-to-return relationship for agriculture relative to other sectors. As a result, more capital would flow into agriculture than would be merited on strictly economic grounds. While an increased supply of capital is put forward as one of the advantages of a secondary market, it might not be an unalloyed benefit. To the extent that it might lead to overcapitalization (as resulted during the 1970s), the sector's vulnerability to cyclical downturns would be increased (as seen in the 1980s). Finally, it should be noted that lack of loanable funds is not a problem for agricultural lenders at this time. One measure of capital availability is the loan-to-deposit ratio (the closer this value is to one, the tighter are supplies of loanable funds). Currently, most agricultural bankers are reporting record-low or near record-low levels for this ratio (around 0.5), and most would like to increase it substantially (to about 0.65). The problem they are facing is a lack of creditworthy customers seeking loans, not a lack of money to loan. A secondary market cannot address this problem.

Secondary Markets in Current Legislation

Both H.R. 3030 and S. 1665 contain language that would create a secondary mortgage market for agriculture. In both bills the secondary market would be constituted within the FCS, but might not be truly a part of the FCS. For example, the board of directors for the secondary market would be made up of equal numbers of representatives of the FCS and other lenders, with the balance composed of individuals not associated with any lender. In addition, the FCS would provide credit enhancement for the secondary market securities, but joint and several liability would not be shared between the institution managing the secondary market and the rest of the system. It is also not clear how capital earned by the secondary market would be reported in the system's financial statements--specifically, it is not clear what, if any, benefit the system would receive if the secondary market was profitable.

There are a few subtle differences between the two bills with respect to the secondary market provisions. In the Senate bill, the originator may sell 100 percent of a qualified loan to the pooler, or may retain 10 percent of the loan. It is not clear that the House bill allows retention of 10 percent of the loan. If 100 percent of the loan is sold to the pooler, a reserve equal to 10 percent of the original amount of the loan must be established. The reserve can be established by the originator (in which case the reserve is invested in government securities), the pooler, or split between the two. The 10 percent in the reserve or the 10 percent held by the originator must be exhausted before the corporation offering the securities becomes liable to the bondholders. The corporation is authorized to charge a fee for credit enhancement (an unspecified amount in the House bill, up to 0.5 percent in the Senate bill). A portion of the money generated from this fee may be used to create a contingency fund for the corporation. If loan defaults exhaust both the reserve fund created by the originators and/or poolers, and the corporation's contingency fund, the corporation has access to a $1.5 billion line of credit with the Treasury. Finally, the House bill would authorize the states to impose such reporting requirements on the operation of the secondary market as they deemed necessary.

As noted, the board of directors for the mortgage corporation would have equal representation from the FCS and other lenders, with the balance of the board drawn from people without affiliation with any lender (the Senate bill would have a 15-member board and the House a 13-member board). Among other things, the board of directors helps to establish the standards that must be met to originate loans for the secondary market and the qualifications for poolers. Both bills authorize the sale of common stock in the corporation to institutions that sell mortgages on the secondary market. They also authorize the mortgage corporation to make assessments on users to pay for its activities.

Implications of Secondary Mortgage Markets

Implications for the System. The conviction that the secondary market would have limited appeal is buttressed by the following argument. Assume that rather than holding 10 percent of the loan, the originator opts to create a contingency fund in Treasury bills of the same amount. Given that the loan to the farmer is a higher-risk loan than a loan to the government (in the form of a Treasury bill purchase), the rate of return on the reserve would be expected to be less than the return on the farm loan. At the same time, the lender would absorb all losses up to the size of the reserve. This implies that for losses up to the size of the reserve, the lender's return would fall while its risk would remain the same. This trade-off would be offset somewhat if the originator was paid a fee for servicing the loan. However, it can be shown that the size of the servicing fee would have to be unreasonably large if the lender was to be indifferent between the two alternatives.

Of course, for losses greater than the size of the reserve, the lender would lose relatively less if the mortgage was sold on the secondary market. Though the underwriting standards cannot eliminate the possibility of a relatively large default, they would be expected to reduce considerably the probability of such a loss. Clearly a lender could choose to use the secondary market for reasons other than achieving a higher rate of return (to be able to offer a service to a valued customer, as a risk management tool, or to increase the bank's liquidity). However, this analysis indicates that a bank's profitability would not be enhanced by using the secondary market.

In conclusion, a borrower would be likely to find that the rate of interest for a loan sold on the secondary market was greater than a comparable loan financed through the Federal Land Bank. For lenders, the expected return would probably be less for a loan sold on the secondary market than for one retained in the portfolio. Given these two conclusions, it is unlikely that a secondary market would seriously undermine the financial condition of the FCS.

Budgetary Impacts. For the reasons noted above, an agricultural secondary market would be unlikely to generate a substantial amount of business and hence would not have a major impact on the cost of either bill. This study estimates that the budgetary impact of a secondary market would neither increase nor decrease federal assistance to the FCS available under H.R. 3030 by more than $50 million over the next five years. The impact on costs under S. 1665 would be even less.

MINIMUM CAPITAL REQUIREMENTS AND INSURANCE PROGRAMS

Two policies that have been discussed in connection with assuring the long-term financial viability of the FCS are minimum capital requirements and insurance programs. These policies are, in fact, closely related. For example, minimum capital levels that have to be maintained by a bank are generally based on the relative riskiness of a lender's portfolio. Likewise, the riskiness of the portfolio would be a major factor in determining how much the lender would have to pay as an insurance premium.

The FCS currently has a type of insurance program--the joint and several liability clause. The incentives provided by joint and several liability are rather perverse, however. For example, if a bank were to adopt a risky lending strategy or draw down its capital to low levels, other districts in the system would have to pay to avoid a default on the profligate district's bonds. At the same time, the errant district would not face higher insurance premiums reflecting its riskier behavior.

Premiums for commercial bank insurance, such as that provided by the Federal Deposit Insurance Corporation (FDIC), tend to be based on the types of assets in the portfolio. The advantage of this type of premium calculation is its simplicity of design and administration. Its major deficiency is that the insurance premium is based strictly on the quality of the portfolio in the current period. For example, if insurance premiums increase as the level of nonperforming loans increase, insurance premiums will rise when the bank is least able to afford them. It would be preferable for the insurance premium to be based on the expected payout for the life of each loan in the portfolio. This method would force the bank making a new loan to face the trade-off between riskier but potentially more profitable lending and higher insurance costs on the one hand, and more conservative lending with a lower average return and lower insurance costs on the other. The major drawback of this approach is that it is more difficult to implement since it requires an estimate of future indemnities. Future indemnities are affected by such things as the nature of the activity in which the borrower is engaged, the borrower's managerial decisions, future economic conditions, and the system's future cost of funds. The future course of all these factors would be difficult to predict.

Minimum Capital Requirements and Insurance in Current Legislation

The House and Senate bills both provide for minimum capital levels for the FCS. In the House bill, the FCA is instructed to develop minimum capital requirements that are to be phased in over a five-year period. The Senate bill also calls for a five-year phase-in of minimum capital levels defined by the FCA, but during the phase-in period institutions are not penalized for failing to attain the specified levels.

Both bills also establish an insurance fund for the FCS and provide a formula for calculating the maximum premium that an institution can be charged. This formula specifies that insurance premiums will be calculated on the basis of the level of performing and nonaccrual loans. Thus, the insurance fund is very similar to the FDIC program for commercial banks. The only major difference between the insurance programs in the two bills is that the Senate would delay its implementation until 1992. If an FCS institution was unable to meet its obligations to its bondholders, funds in the insurance pool or reserve fund would be the first source of supplemental capital. Only if there were insufficient funds in the insurance pool to cover the default, would the traditional joint and several liability be invoked. If capital was assessed in the name of joint and several liability, this legislation would limit initial assessments to capital that is in excess of the minimum capital levels. If retained earnings in excess of minimum capital levels were insufficient to cover responsibilities to bondholders, additional assessments could be made.

Implications of Minimum Capital Requirements and Insurance Programs

Impact on the System. While both of these provisions would increase the cost of operations for the FCS, there are several important advantages to both minimum capital requirements and some form of insurance. One advantage is that both measures would place the FCS on a footing similar to that of commercial banks. Commercial banks purchase deposit insurance through the FDIC or through state insurance boards. In addition, minimum capital standards are also imposed on banks. Thus, the FCS would not be put at a competitive disadvantage to commercial banks by having to establish minimum capital levels and pay insurance premiums (assuming these are both set at levels comparable to those of commercial banks).

Perhaps the most significant long-term effect of these requirements would be that they could provide a means of reducing the federal role in agricultural credit markets. To the extent that minimum capital requirements and an insurance fund would diminish the need for a link between the FCS and the federal government, agency status could be reduced or eliminated. The experience of the savings and loan industry and of the Federal Savings and Loan Insurance Corporation suggests that creation of these safeguards would probably not eliminate governmental involvement in credit institutions. Nevertheless, they should reduce the frequency and magnitude of governmental involvement.

Budgetary Impacts. Because both the minimum capital requirements and the insurance programs are structured differently in the two bills, their budgetary impacts would be quite different.

As noted above, the Senate bill would not penalize institutions for failing to attain minimum capital levels. In addition, there would be no explicit link between receiving assistance and attaining these minimum capital levels, which means that federal funds would not be supplied for the purpose of boosting capital levels. As a result, the cost of this program is minimized. With respect to the insurance fund, since it would begin only in 1992, its impact on the cost of the bill during the first five years would be minimal. Since the insurance fund would be controlled by a government institution, premiums paid would be scored as receipts in the federal budget. This study estimates that the provisions dealing with minimum capital requirements and the insurance program would reduce the cost of the Senate bill by about $5 million.

The House bill, in contrast, has no separation between an institution's financial condition and the establishment of minimum capital levels or the payment of insurance premiums. Since banks would be required to attain these capital levels and buy insurance, the government would have to provide financially troubled portions of the system with the capital to do so. This may be wise, given a desire to establish the long-term viability of the system, but in the short term it would be a more expensive approach than the Senate's. The study estimates that the cost of these two factors could increase the cost of the House bill by $1.8 billion during the next five years.

CHAPTER IV

BORROWERS' RIGHTS

There is a widely shared view in the Congress and elsewhere that addressing the troubles of the FCS ultimately means addressing the financial problems of its borrowers. While the two FCS assistance bills before the Congress do not directly address farm profitability, both bills place relatively strict limits on the freedom of action of the FCS toward borrowers in financial difficulty. These limits have come to be referred to as borrowers' rights. The borrowers' rights considered in the bills include:

- Increased access to information;
- Formalization of the loan restructuring process; and
- Exemption of some assets from the bankruptcy settlement.

The concern with borrowers' rights stems from a desire to increase the availability of information about the borrowing process, concern that perhaps the FCS has been too quick to foreclose on distressed borrowers, and a desire to reduce the trauma associated with foreclosures when they occur. Two questions arise with respect to this effort. First, has the FCS behaved differently toward its borrowers than have other lenders? Second, if the FCS has behaved differently, is a legislative response appropriate?

FCS BEHAVIOR RELATIVE TO ITS STRESSED BORROWERS

Probably the key factor in the area of borrowers' rights is the concern about farm foreclosures. There has been an overall increase in foreclosure activity during the past few years, though the precise dimensions of the problem are hard to determine because of a lack of data.

The Department of Agriculture reports that the four major institutional lenders--the FCS, commercial banks, insurance companies, and the Farmers Home Administration--hold approximately eight million acres of farmland.1/ While the FCS has 53 percent of the agricultural real estate debt accounted for by the four institutional lenders, it holds only 35 percent of the acquired properties (Table 2). Thus, the FCS does not have a disproportionate share of the stock of acquired properties, implying that it has not been extraordinarily quick to foreclose on borrowers.

Another factor that needs to be considered in assessing the performance of the FCS with respect to loan foreclosures is the riskiness of its portfolio. As the riskiness of loans in a lender's portfolio increases, the likelihood of foreclosure should also increase. One measure of the probability of foreclosure in the current year would be the level of delinquent loans in the previous year (since there is a lag between the time a loan becomes delinquent and the time foreclosure is completed). As shown in Table 2, the FCS, with $5.3 billion, has more than twice as much delinquent debt as commercial banks and nearly three times as much as insurance companies. Only the Farmers Home Administration, which as lender of last resort would be expected to have a riskier portfolio, has more delinquent debt. The higher delinquency level in 1985 is consistent with the larger amounts of acquired property currently in the FCS portfolio.

A second indicator of the riskiness of a lender's portfolio would be the percentage of debt owed by borrowers who have debt-to-asset ratios above 0.7 and a negative cash flow. Again, this measure is lagged a year. Table 2 indicates that borrowers in this financially stressed category held slightly more of the FCS debt than they did of commercial bank debt. This indicates that the percentage of the FCS portfolio at risk is similar to that of commercial banks. As noted above, the FCS holds less acquired property than its market share might suggest. Thus despite having a similar level of risk (as indicated by this measure), the FCS has proportionately less acquired property.

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1. Department of Agriculture, *Agricultural Outlook* (September 1987), p. 20.

In summary, while the FCS has the largest share of acquired farm property, it does not appear to have been more aggressive in using this option than have other major lenders.

EQUITY ISSUES ASSOCIATED WITH BORROWERS' RIGHTS

Whether or not the FCS has behaved differently toward its borrowers, there is the broader issue of the appropriateness of a legislative response to the problem. Granting special rights to FCS borrowers would raise two sets of equity concerns. First, there is the question of equity across lenders--specifically, that rights granted to FCS borrowers might place the system at a competitive disadvantage vis a vis other agricultural lenders. Further, if borrowers' rights are a good thing, should not all lenders be required to conform to a uniform code of conduct? Why, for example, should a borrower from the FCS be given the right of first refusal on property lost through foreclosure (as would be provided in both the Senate and House bills) while a similar borrower foreclosed upon by an insurance company would not have this option?

The second equity issue concerns borrowers. In some instances, borrowers' rights would convey to a borrower the ability to renegotiate the terms of the loan. Because this ability would be contingent upon being delinquent or at high risk of default, borrowers who remained financially sound would be penalized, at least in a relative sense. This could induce borrowers who are now current on their loans to become delinquent in order to take advantage of these provisions. In contrast, financially stressed borrowers would be rewarded in an absolute sense for what might have been their poor managerial decisions.

BORROWERS' RIGHTS IN CURRENT LEGISLATION

The two bills have many similarities in their treatment of borrowers' rights, though the House bill goes further than the Senate bill. Both the House and Senate bills would increase the access of borrowers to information. The Senate bill would make FCS lending conform to the standards set by the Truth in Lending Act. For example, it would require that information about interest rates and limits on interest rate adjustments for variable rate loans be provided to all borrowers. The House bill would give borrowers access to all information about themselves in the possession of the FCS institution.

The main focus of the borrowers' rights provisions of both bills is on loan restructuring. In both, the FCS would be required to provide all borrowers with advance notification of its intention to initiate foreclosure. The Senate bill would require notification 14 days before foreclosure is initiated, the House 75 days. Both bills would require that borrowers be notified of their right to be considered for loan restructuring, that they be given a written explanation if their request is denied, and that they be told of their right to appeal. Both bills would create units to review or assist in implementing loan restructuring programs. In addition, the criteria used in determining eligibility for restructuring are set forth in some detail in the two

TABLE 2. COMPARATIVE DATA ON MAJOR AGRICULTURAL LENDERS

	Real Estate Debt Outstanding 12/31/86 (billions of dollars) a/	Percent of Four Lenders	Acquired Property 2/87 (millions of acres) b/	Percent of Four Lenders
Federal Land Bank	36.2	0.53	2.8	0.35
Commercial Banks	11.3	0.17	1.2	0.15
Insurance Companies	10.4	0.15	2.4	0.30
FmHA	10.3	0.15	1.6	0.20
Total	68.1		8.0	

SOURCE: Compiled by the Congressional Budget Office from the publications indicated.

a. Department of Agriculture, *Agricultural Finance Situation and Outlook Report* (March 1987).

b. Department of Agriculture, *Agricultural Outlook* (September 1987).

c. Farm Credit Corporation of America, *National Credit and Review Standards Monitoring Report: Acquired Property* (December 1986).

pieces of legislation. If foreclosure does occur, both bills would give the original borrower the right of first refusal when the former property is sold. In the House bill the borrower would have up to 60 days to offer to buy or lease the property at current market value, while the Senate bill would allow the borrower only 15 days to submit an offer upon notification of intent to sell. Finally, both bills would foster the creation of state mediation boards that would try to bring borrowers and lenders to some agreement on how to handle their financial difficulties.

The major difference between the two pieces of legislation in the area of borrower rights is H.R. 3030's inclusion of a "homestead" provision. This provision would allow a borrower who has been foreclosed upon to retain possession of the principal residence and up to 10 acres of adjacent land.

TABLE 2. (Continued)

Number of Loans Foreclosed 1986	Delinquency Rates 1985 (billions of dollars) e/	Percent of Debt Owed by Farms with D/A Ratio 0.7 and Negative Cash Flow 1/1/86 a/	Percent of Borrowers with D/A Ratio 0.7 and Negative Cash Flow 1/1/86 a/
3,776 c/	5.3	18.6	11.2
n.a.	2.6	17.1	9.2
1,654 d/	1.8	n.a.	n.a.
89 a/	11.9	45.0	24.4
	21.6		

d. American Council of Life Insurance, *Investment Bulletin* (March 20, 1987).

e. Emanuel Melichar, "Agricultural Finance: Turning the Corner on Problem Farm Debt," *Federal Reserve Bulletin* (July 1987). Data are for entire portfolios of lenders rather than simply real estate loans.

IMPLICATIONS OF ADDITIONAL BORROWERS' RIGHTS

Implications for the FCS

The purpose of restructuring is to transform a loan that is either not accruing interest at all or not at the rate specified in the loan contract into one that may perform as specified. Restructuring could also be expected to generate goodwill among FCS borrowers. Some borrowers might conceivably prefer a loan from the FCS because of the additional protection offered by the borrowers' rights package.

There are, however, several disadvantages associated with the borrowers' rights provisions. First, to the extent that these rights increase the FCS's cost of doing business, interest rates on loans will rise. For example, one cost of restructuring would be a reduction in FCS capital by the amount of any debt that was written off. Another cost would be the reduced income in future periods from a now-smaller loan, or deferred payments. If the restructured loan failed to perform as expected, additional costs would be generated. All of these costs would make it more difficult for the FCS to compete with lenders who are not required to abide by the borrowers' rights provisions.

A second, and related, disadvantage is that the system might become more selective in its lending if extraordinary costs were associated with loans that became delinquent. While this might be sensible and realistic behavior, the total supply of capital for agriculture would fall. Finally, though restructuring might be beneficial in some cases, it could be a much more expensive alternative for both parties if expectations were not realized. The lender's losses have been discussed above. For the borrower, remaining equity might be lost, either because the value of the collateral might fall or because additional losses could consume the remaining equity.

In sum, inclusion of borrowers' rights provisions in legislation raises a number of short-term and long-term issues. In the short term, many of the borrowers' rights provided by the bills have the effect of retroactively altering the terms of the loan contract. It is not clear that this is fair to the FCS, to borrowers in good standing within the

FCS, or to non-FCS borrowers. In the long term, requiring the FCS to provide rights to its borrowers that other lenders do not provide could reduce the relative competitiveness of the system.

Budgetary Implications

Enhancing borrowers' access to information would not have major budgetary implications. For the restructuring provisions, CBO's initial cost estimate assumed that even without legislation mandating this approach, bankers would restructure loans if that was the least-cost alternative. However, the right of first refusal, various administrative expenses, and, for the House bill, the homestead provision would increase the amount of federal assistance needed. Over the next five years, the borrowers' rights provisions could be expected to add $360 million to the House bill and add $350 million in bond sales and $65 million in interest expenses to S. 1665.

CHAPTER V

FEDERAL ASSISTANCE FOR THE FARM CREDIT SYSTEM

The central issue in the debate over the future of the Farm Credit System is the provision of federal assistance. But this raises a number of questions:

- What is the public interest in the FCS?
- How much assistance might be needed?
- What form should the assistance take?
- When should federal infusions begin?
- What degree of oversight should accompany the assistance?

THE PUBLIC INTEREST

Provision of assistance for the FCS has become a forgone conclusion. Assistance will be provided either through new legislation, or by means of the 1985 Farm Credit Act.1/

Arguments Against Assistance

There are, however, legitimate questions as to the appropriateness of this expenditure. The most basic question is whether the FCS is still needed. The FCS was created by the Congress beginning in 1916 when

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1. The Farm Credit Act of 1985 requires that prior to receiving federal assistance, the Farm Credit Administration must certify that the FCS has fully utilized internal resources in dealing with its financial problems. After the FCA has provided such certification, a line of credit will be established with the Treasury. The amount in the line of credit is subject to appropriations.

the Federal Land Banks were established, in order to address a severe shortage of capital in the agricultural sector. This shortage was largely the result of poorly developed capital markets and agriculture's lack of access to such capital sources as did exist. Given the increasing integration of capital markets (through multibank holding companies, participation agreements between small local banks and regional or money-center banks, and improved communications and information processing capabilities), the institutional imperative for the FCS is less obvious.

A philosophical case against assistance for the FCS could also be built around the argument that this will increase the involvement of the government in allocating credit across sectors. Legislation has conferred "agency status" on the FCS. Agency status grants certain tangible benefits to the FCS (such as exemption from state and local taxes on its bonds, and acceptance of its securities by the Federal Reserve as collateral for advances to banks). Probably more important, its agency status means that investors regard FCS bonds as implicitly backed by the government, even though no explicit governmental guarantee is attached to them. Agency status allows the FCS to raise funds in national capital markets at rates that are only marginally higher than Treasury bill rates. In and of itself, agency status increases the flow of investment capital to the agricultural sector. Providing assistance to the FCS will be seen by investors as tangible proof that their presumption of federal guarantees for FCS bonds was valid. This will perpetuate, if not exacerbate, the role of government in determining the distribution of capital.

Provision of assistance to the FCS also raises equity issues. As shown in Table 3, nearly 400 banks have been declared insolvent and closed during the past three years. The percentage of failed banks classified as agricultural banks, though falling, has been quite high (nearly 60 percent in 1985, roughly half in 1986, and 40 percent through mid-September 1987). Clearly, many non-FCS banks have experienced financial difficulties during the past few years. Why, then, should the FCS receive direct assistance when commercial banks do not?

Arguments for Assistance

Proponents of assistance to the FCS generally base their arguments on three factors: the importance of the system for agriculture; past federal involvement with the FCS; and the potential effect of a FCS failure on national capital markets. The FCS had total assets of $63.6 billion at the end of the second quarter of 1987 and is the largest institutional lender serving agriculture. FCS dominance in the farm real estate market is even more pronounced: it held nearly 40 percent of farm real estate debt at the close of 1986. It would be very difficult to find institutions able and willing to assume its loans if major parts of the FCS were declared insolvent. The disruptions in the agricultural sector associated with a collapse of the FCS would be considerable, at least in the short term.

As noted above, the FCS has agency status and all of the benefits associated with it. Government involvement does not end with agency status, however. For example, the FCS is restricted by law to lend only to agriculture. Thus, in contrast to other agricultural lenders, its legislative mandate reduces the ability of the FCS to diversify risk. Because it has a dedicated mission, it may merit special treatment by the government.

Finally, some analysts fear that a failure by the FCS would adversely affect national capital markets. The failure of any $60 billion financial entity would be difficult for capital markets to accommodate. Failure of the FCS might also have a spillover effect on other

TABLE 3. COMMERCIAL BANK FAILURES

	1985	1986	1987 a/
Total Commercial Bank Failures	118	136	129
Agricultural Bank Failures b/	68	65	51

SOURCE: Emanuel Melichar, "Agricultural Finance: Turning the Corner on Problem Farm Debt," *Federal Reserve Bulletin* (July 1987), update of September 18, 1987, Appendix B.

a. Through September 17, 1987.

b. An agricultural bank is one that had an above-average farm loan ratio in December of the year preceding closure.

agency lenders. For example, how would buyers of one of the agency lenders in the housing market react to an FCS failure? Thus far, evidence suggests that the other agency lenders are somewhat insulated from the problems of the FCS. The premium paid on bonds issued by these lenders has remained roughly constant throughout the travails experienced by the FCS. It could be argued, however, that this is because the financial markets discount the possibility that the government would let the FCS fail.

THE AMOUNT OF ASSISTANCE

The amount of assistance needed depends not only on general economic factors but also on what might be termed institutional factors, including the degree of cooperation achieved within the system and the details of the legislation providing federal help. For example, in Chapter III it was noted that H.R. 3030 puts an insurance program in place. The premiums that FCS banks have to pay for coverage would increase the total amount of assistance required. In Chapter VI a detailed account of the cost of both bills will be presented. This section presents estimates of the amount needed before any additional legislative requirements are imposed.

This study used the model described in the Appendix to generate an estimate of the amount of assistance needed by the FCS. In the base case it was assumed that assistance would be provided in sufficient amounts to forestall impairment of borrower stock under Generally Accepted Accounting Practices (GAAP). It was also assumed that no additional transfers of capital between districts would occur. Three scenarios were considered. A complete list of the assumptions used in each of the three scenarios is included in the Appendix. Table 4 highlights some of the differences between the three cases.

As shown in Table 5, the assumptions employed in the most likely case would result in total assistance through calendar year 1992 of $2.8 billion. Under the optimistic assumptions, only $2.4 billion would be required to avoid borrower stock impairment. If the pessimistic assumptions proved correct, total assistance would be nearly $3.4 billion.

TABLE 4. DIFFERENCES IN ASSUMPTIONS USED IN MODEL PROJECTIONS

	1987	1988	1989	1990	1991	1992
			Performing Loans			
Most Likely (percent change from previous year)	a/	a/	0	5	5	5
Optimistic (percent change from previous year)	b/	0	5	5	5	5
Pessimistic (percent change from previous year)	c/	c/	0	2.5	5	5
			New Nonaccrual Loans			
Most Likely (percent change from previous year)	-70	-25	-25	-25	0	0
Optimistic (percent change from previous year)	-75	-25	-25	-25	0	0
Pessimistic (percent change from previous year)	-65	-25	-25	-25	0	0
			Gross Charge-offs			
Most Likely (percent of opening nonaccruals)	40	40	40	30	30	30
Optimistic (percent of opening nonaccruals)	40	40	30	30	30	30
Pessimistic (percent of opening nonaccruals)	40	50	40	40	30	30

SOURCE: Congressional Budget Office assumptions for an annual accounting model.

a. Decline at one-quarter the rate observed during the previous year.

b. Decline at one-eighth the rate observed during the previous year.

c. Decline at one-half the rate observed during the previous year.

The variables that have the greatest effect on the model's results are the level of performing loans and provisions for loan losses. In 1992, performing loan volume is projected to be nearly $8.0 billion less in the pessimistic case than in the most likely case. Because performing loan volume is down and because interest rates charged decline more rapidly in the pessimistic case, interest income also falls. For the years 1987 through 1992, the pessimistic case generates $4.1 billion less interest income than does the most likely case.

Interest expenses are also lower in the pessimistic case, since a lower level of debt is carried by the system. The decline in interest expense does not fully offset the decline in interest income, however, so net interest income for the six-year period is $1.6 billion less in the pessimistic case than in the most likely case.

There is some evidence to support the assumptions employed in the most likely case, at least for 1987. For example, performing loans

TABLE 5. SELECTED MEASURES OF PROJECTED FARM CREDIT SYSTEM FINANCIAL PERFORMANCE, ASSUMING NO LEGISLATIVE CHANGES (In billions of dollars)

	Scenario		
	Most Likely	Optimistic	Pessimistic
Cumulative Capital Shortfall (GAAP), 1987-1992	2.8	2.4	3.4
Volume of Performing Loans--1992	54.4	60.1	46.5
Volume of Nonaccrual Loans--1992	2.9	2.6	2.9
Loan Loss Reserve--1992	0.9	2.2	1.6
System Debt--1992	53.4	53.6	46.4
System Surplus--1992	6.6	7.4	5.6

SOURCE: Congressional Budget Office cost estimates.

fell by $3.5 billion during the first nine months of 1987 to stand at $47.6 billion, compared to a projected level of $47.8 billion at year-end in the most likely case. At the end of the third quarter of 1987, the FCS reported $6.0 billion in nonaccrual loans, versus $5.9 billion in the most likely scenario projection. The model's prediction of net interest income of $0.8 billion for 1987 is slightly more optimistic than the system's reported earnings of $0.4 billion over the first nine months of the year.

The significant differences between the results of the pessimistic and optimistic models should raise a number of cautions. First, it is difficult to predict accurately the future levels of the variables that are so important in determining the system's financial fate. Second, many of the factors that will influence these important variables are beyond the control of the FCS. For example, future provisions for loan losses will be determined by such factors as the rate of economic growth both here and abroad, exchange rates, the weather, and the quality of new loans made by the system. Only the last of these variables is under the control of the FCS. Another important variable, loan volume, will be affected by many of the same factors plus the competitiveness of the FCS relative to other agricultural lenders. To the extent that the system's competitiveness is eroded by requiring it to incur costs not borne by other lenders (for example, some of the borrowers' rights provisions discussed earlier), loan volume would be expected to fall and the cost of government assistance to rise. In short, the large change in needed assistance caused by relatively small differences in a few key variables indicates the fragility of the system's financial condition.

A different approach to determining the amount of federal assistance needed is to estimate the system's debt-servicing capacity, where debt-servicing capacity is defined as net income divided by the cost of debt. If an institution's debt-service capacity is less than its actual debt outstanding, it has more debt than it can service. One analysis examined the FLBs' debt-service capacity based on three projections of income and balance sheet figures in 1989.2/ This study found that the FLBs had between $2.1 billion and $4.7 billion of debt

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2. See Charles Dodson and Bruce Bullock, "Estimates of Federal Land Bank Excess Debt," Working Paper 1987-16, Department of Agricultural Economics, University of Missouri, Columbia, Mo. (September 1987).

they could not service. The corresponding CBO estimate of assistance needed by the FLBs through 1989 ranges from $2.0 billion in the optimistic case to $2.5 billion in the pessimistic scenario.

The authors of the above-mentioned study conclude that "loans are not a solution to an excess debt problem of any borrower, including the Farm Credit System. A borrower with an excess debt problem already has more debt than can be repaid from expected income sources. Thus [an] equity capital injection or [an] assumption of the excess debt obligations by the government are the only meaningful solutions to the excess debt problem."3/ Given that some assistance for the FCS appears to be required, the next issue is how this aid might be tendered.

THE FORM OF FEDERAL ASSISTANCE

Federal assistance could be through direct capital transfers, government guarantees, or changes in the rules governing operating procedures.

Transfers of Capital

Capital infusions could take any of several forms. One option would be to provide the FCS with a loan (for example, through Department of the Treasury purchases of FCS bonds or lines of credit with the Treasury). The preceding section suggests that, if a loan is made, some form of subsidy or grant would have to be involved in order to solve the financial problems of the system.

A second form of direct transfer would be for the government to take over responsibility for servicing part of FCS debt. One means of doing this would be an interest-rate swap. An interest-rate swap is an arrangement between the Department of the Treasury and the FCS in which debt obligations are exchanged. For instance, the Treasury could agree to service some or all of the high-cost debt currently held by the FCS while the system would pay the interest expenses for the

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3. Ibid, p. 11.

same amount of low-cost Treasury debt. In one analysis of a three-year interest-rate swap, the cost to the Treasury was $3.6 billion, and the system returned to profitability by the end of the swap.[4]

Third, the government could transfer assets to the FCS as a means of bolstering the system's financial condition. The assets most commonly considered for such a transfer are those currently held by the Farmers Home Administration (FmHA) or the Commodity Credit Corporation (CCC). Either real assets, such as farmland and grain stocks, or financial assets, such as performing loans, might be considered for conveyance to the FCS. Transfer of the assets could be in the form of a gift or donation, or they could be sold to the FCS at a discount.

The transfer of real assets would have some drawbacks. Specifically, these assets would generally have to be sold to generate cash. Both commodity markets and land markets have been extremely weak in recent years, and the rapid disposal of large amounts of crops or acres could prolong this slump. To the extent that asset sales caused prices to fall, the FCS would be undermining its own financial condition. Falling land prices reduce the value of collateral backing FCS real estate loans, thereby exposing it to greater risk if the borrower becomes insolvent. If commodity prices were further depressed by sales of CCC stocks, this could reduce the ability of FCS borrowers to pay their debts. Transfers of financial assets would assist the system to the extent that they continued to perform according to terms and did not demand extraordinary amounts of servicing.

Federal Guarantees

The principal federal guarantee that might be considered is a more explicit guarantee of the interest and principal owed to bondholders. An explicit guarantee of FCS bonds would be expected to reduce the spread between Treasury bills and FCS bonds. However, since this spread is already relatively small (25 to 75 basis points in general) and would affect only additions to the system's debt, an explicit federal guarantee would have a modest impact on the system's financial condition.

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[4] David Freshwater, "Policy Options for Providing Financial Assistance to the Farm Credit System," paper presented at the NC-123 Conference, October 1986.

Changes in Operating Procedures

Finally, rather than provide government transfers or more explicit guarantees on FCS bonds, changes in FCS operating procedures could be considered. One such change that has been discussed would be to create a special class of FCS bonds that would not have to be fully collateralized. When an FCS entity has insufficient assets to fully back all of its liabilities, it is said to have exhausted its collateral. Lack of collateral precludes the issuance of new debt. Moreover, when collateral is depleted, the ability of the district to meet its obligations to its bondholders is limited, thus triggering the joint and several liability clause. Relaxing or eliminating this requirement would allow a financially troubled district to sell additional bonds to meet obligations to bondholders and to redeem borrower stock. Such bonds would have to have a more formal governmental guarantee to make them salable. As discussed above, government guarantees generate potential future liabilities for the government. In addition, if, as the analysis of debt-service capacity indicated, the FCS already has more debt than it can service, this approach would simply increase the ultimate cost of dealing with the FCS's problems unless a more direct government subsidy was attached to the bond issues.

THE TIMING OF ASSISTANCE

In addition to the amount and form of assistance, an important variable in the success of federal assistance would be its timing. There are two competing interests in defining the point at which federal assistance is triggered. On the one hand, there is the desire that the system use as many of its own resources as is practical in dealing with its problems. After all, the FCS is supposed to be a private-sector lender and should be willing to accept the risks as well as the rewards of business. This implies that the FCS should first exhaust its own capital sources before federal assistance becomes available. Capital in the system is composed of earned surplus and equity purchased by borrowers, in the form of borrower stock and participation certificates.

One view is that both types of capital should be utilized in dealing with the FCS's problems. After all, if a private corporation is forced into bankruptcy, the capital contributed by stockholders is at risk, meaning that creditors must be satisfied before anything is paid to the stockholders. In this view, assistance should not be triggered until a bank has exhausted its capital and is precluded from participating in FCS bond issues. In fact the system has mobilized considerable amounts of capital in an attempt to deal with its financial problems. Several hundred million dollars have been transferred from stronger institutions to weaker ones in this attempt.

The other viewpoint suggests that delaying assistance too long would increase the final cost to the government. One example of this latter danger is the problem of borrower flight. FCS institutions are said to be owned by their borrowers. Ownership of these institutions is expressed through the purchase of borrower stock. Though the dimensions of the problem are unclear, many analysts assert that borrowers are fleeing the system because they feel their equity investment is at risk. Loss of these borrowers, who are said to [illegible] the most financially sound, reduces both the level of system capital and the volume of performing loans. Further, it is suggested that because the borrower stock purchase is not voluntary (it is a required part of obtaining a loan from the FCS) and because it has generally not been considered to be at risk, this source of capital should not be used to deal with the system's financial problems. This line of argument suggests that federal assistance should be triggered at the point when borrower stock is impaired.

MANAGING ASSISTANCE

Unless federal assistance is given to the FCS in one lump-sum payment, some sort of mechanism to manage disbursements to the system will have to be created. In defining the institution through which aid will flow, a trade-off exists between control on the one hand and flexibility on the other. Opting for greater control would allow oversight over how the money was spent and permit the government to have a greater impact on policymaking within the system (for example, various internal reforms could be preconditions for assistance). The advantage of a more flexible approach would be in encouraging local input into decisionmaking. If a centralized, governmentally controlled entity was in charge of disbursing assistance, national standards might be applied to local problems. For example, there is a good deal of concern within the FCS about lending criteria. It would, however, be extremely difficult, if not impossible, to define a workable set of national guidelines for lending practices.

FEDERAL ASSISTANCE IN CURRENTLY PROPOSED LEGISLATION

Substantial differences exist between S. 1665 and H.R. 3030 with respect to the provision of assistance for the FCS. H.R. 3030 states that, subject to appropriations, such sums as may be necessary would be provided to the FCS. The amount the House would like to be authorized for 1988 is suggested by a floor amendment calling for the sale of $2.5 billion of FmHA assets. Assistance would be in the form of sale of stock to the Treasury. Repayment of funds borrowed from the Treasury would begin five years after the enactment of H.R. 3030 or one year after the insurance fund exceeded the secure base amount (as defined by the bill), whichever was sooner. Funds for repayment would come from an assessment on all banks of one-fifth of 1 percent of the average amount of accruing loans outstanding during the preceding year. The House bill would rescind authorization for the system to use the RAP system of accounting and would commence assistance when borrower stock was impaired on a GAAP basis. Assistance would be managed by a newly created institution called the Temporary Assistance Corporation (TAC). The TAC would have extensive powers, including the rights to approve a district's business plan (approval being a prerequisite to obtaining assistance), to purchase nonaccrual loans from system institutions, and to require FCS institutions to sell nonaccrual loans that have more than $500,000 in principal outstanding.

The Senate would authorize the creation of a new class of FCS bonds that would be issued without collateral. The system would be authorized to sell $4.0 billion of these special bonds. The government would guarantee the bonds but would exercise the guarantee only if system resources were insufficient to cover responsibilities to the holders of these special bonds. The government would provide annual assistance equal to the amount of interest due on the bonds for the first five years and half the amount of interest due during the second five years. As currently written, the first $2.0 billion of this assistance would not have to be repaid. Substantively, this grant would be no different than the one implied by the House bill (no interest would be paid on funds acquired from the Treasury through the sale of stock, making it an interest-free loan). Assistance under the Senate bill would not be triggered until 25 percent of a bank's borrower stock had been depleted by losses (though all stock would be redeemed at par during the first five years). Assistance in S. 1665 would be managed by an institution called the Assistance Board (AB). The powers and responsibilities of the AB would be very similar to those of the TAC in H.R. 3030.

Implications of Proposed Legislation

Implications for the System. Both bills have opted for a relatively large degree of oversight regarding federal assistance, and give considerable power to the entities that would manage the flow of assistance (the TAC in the House bill and the AB in the Senate bill). As noted earlier, national management of a set of local problems might be inappropriate. Previous government assistance efforts such as those provided to Chrysler, Lockheed, and New York City were aimed at institutions that were much more homogeneous than the FCS and had more top-down management. This model may be inappropriate to the FCS, which makes loans in local markets under relatively diverse conditions.

Budgetary Implications. The most significant difference in the two approaches to funding FCS assistance is with respect to their budgetary treatment. Assistance provided under H.R. 3030 would be on-budget. The intent of S. 1665 is to move the bulk of the assistance off the budget. At issue is whether or not the value of uncollateralized bonds sold by the AB or some other entity should be counted as governmental expenditures (there is no question that payments made by the government that were tied to interest payments due would be treated as outlays). The argument for treating the bonds as a non-budgetary item is that these bonds would be issued by an entity within the FCS, and system entities would have equity invested in the institution. Since the FCS is a private-sector lender and none of the other bonds sold by the FCS are treated as government outlays, neither should the new class of bonds be treated as such.

The opposite view is held by those who say that the government guarantee and the functional purpose (providing assistance rather than making income-generating loans) of the AB suggest that it would be truly a government entity and the bonds it issues should be treated as on-budget outlays. An alternative would be to treat the uncollateralized bonds in the same way guarantees have traditionally been treated, as a contingent liability for the government. Such contingent liabilities have been scored as outlays in the budget only when exercised. A detailed treatment of the policy and budgetary implications of the two bills is presented in the following chapter.

CHAPTER VI

A COMPARISON OF THE HOUSE AND SENATE BILLS

Three major issues must be addressed in any legislation dealing with the financial problems of the FCS: system restructuring, borrowers' rights, and the nature and extent of federal assistance. The House and Senate bills are often similar in their general approach to these three topics. However, significant differences exist in the details of the bills.

The House bill would more explicitly commit federal funds to resolving the financial problems of the FCS for the foreseeable future than would the Senate bill--but at higher cost. The House bill contains provisions requiring greater recapitalization (via capital reserves and an insurance program), and more comprehensive system restructuring, than does the Senate bill. Because the House bill would use federal funds to reestablish the capital position of the system, its cost would be relatively high. The House bill would make more policy-motivated changes in the structure and operation of the system (for example, more extensive borrowers' rights) than would the Senate bill.

The Senate bill is characterized by an effort to minimize its budgetary effects, principally by moving the bulk of the assistance package off the budget. Although this effort would dramatically reduce the budgetary impact of the Senate bill relative to the House proposal, it would still commit significant amounts of the country's resources to assisting the FCS.

FEDERAL ASSISTANCE IN THE HOUSE AND SENATE BILLS

This study estimates that, in the absence of legislation, the system's expected capital shortfall measured on a GAAP basis will be $2.8 billion through the year 1992. Allowing for the unforeseeable, a likely range for the shortfall is $2.4 billion to $3.4 billion. This is the base from which the study analyzes legislative changes that would affect the profitability of the system. The budgetary impact of the House bill is relatively straightforward. Analysis of the Senate bill is more complex, since a distinction must be made between the bill's budgetary cost and its draw on the nation's capital markets.

Both the Senate and the House bills would, subject to appropriations, provide the system with sufficient assistance to enable it to regain its financial footing. The bills differ in the form of assistance and the point at which it would become available. Moreover, each bill provides for legislative changes affecting the system's capital position that would require additional funding. The House bill would increase federal spending by $6.2 billion through fiscal year 1992. In contrast, the Senate plan would only cost the government $0.8 billion over the first five years. The drain on capital markets, as represented by the borrowing that would result from the Senate bill, would be $3.1 billion. This section summarizes the component parts of the total cost estimates of the two bills.

Summary of H.R. 3030

The costs associated with the individual provisions of H.R. 3030 are summarized in Table 6. First, the House bill would reverse assessments made by the Farm Credit System Capital Corporation (Capital Corporation) and loss-sharing assessments made during the third quarter of 1986. The 1985 Farm Credit Act created the Capital Corporation and empowered it to assess financially healthy banks for funds needed to help weaker banks. This attempt at self-help has been the subject of a great deal of litigation, caused mainly by disagreements over the size of Capital Corporation assessments. The House bill would remove this source of controversy at a cost of approximately $800 million over the five-year period.

Second, H.R. 3030 would allow current borrowers to convert existing stock to a new, at-risk form of stock, or to reduce their indebtedness by the amount of their stock. It is unlikely that borrowers would benefit from converting to at-risk stock. Given the financial condition of the system, holders of at-risk stock could expect little in the way of patronage dividends; they would face a substantial risk of not being able to redeem the stock at par after the first five years (during which it would be guaranteed by the government); and they would have to continue paying interest on the debt used in the purchase of the new stock. For these reasons, the study assumes that borrower stock would decline to negligible levels in 1988. The redemption of borrower stock would reduce FCS capital and (because borrower debt would be reduced by a like amount) diminish interest income in each subsequent year. Since borrower stock conversion would increase losses experienced by the system, an additional $500 million of federal assistance would be needed.

Borrowers' rights provisions would also increase the cost of H.R. 3030. The study assumes that FCS institutions are already restructuring loans if this is the least-cost alternative to dealing with financially stressed borrowers, so no additional costs would be generated by the restructuring portions of the borrowers' rights provisions. Likewise, the right of borrowers to see whatever is in their FCS

TABLE 6. SUMMARY OF ESTIMATED COSTS OF ASSISTING THE FARM CREDIT SYSTEM VIA H.R. 3030
(Total for fiscal years 1988-1992, in billions of dollars)

	Estimated Cost
Base Case--No Additional Legislative Requirements	2.8
With assessments reversed	3.6
With borrower stock dropped	4.1
With borrowers' rights	4.4
With system restructuring	4.3
With insurance	4.9
With minimum capital requirements	6.2

SOURCE: Congressional Budget Office cost estimates.

files would not generate additional costs. However, the study has concluded that other borrowers' rights, in particular the right of first refusal and the homestead provisions, would result in increased expenditures. The cost of these provisions through 1992 is estimated to be $360 million.

The House bill contains provisions for system restructuring. These include the authorization to merge unlike associations, the dissolution of district banks, and the formation of regional service centers. Because the structure of the FCS would be radically altered by these changes, it is difficult to predict their ultimate impact on the cost of the assistance package. The study assumes that some improvements in the operating efficiency of the system would result from reduced overhead at the association level and that some economies of scale would be achieved by going to six service centers. As a result, the estimated cost of H.R. 3030 falls by $100 million because of changes in the organization of the FCS.

H.R. 3030 would create an insurance system similar to the Federal Deposit Insurance Corporation covering commercial banks. Premiums would be based on the size and riskiness of the banks' portfolios. For institutions projected to be losing money, this additional expense would increase the cost of H.R. 3030 by the full amount of the premium. Banks at or near the break-even point would find that they needed federal assistance to make some or all of their insurance premium payments. The insurance program would cost the government an estimated $500 million during the next five years.

The House bill would require the FCA to establish minimum capital standards for FCS banks. The form and level of these minimum capital requirements are not specified but the bill calls for their gradual introduction over five years. The study assumes that these capital requirements would equal 5 percent of the FCS's average outstanding assets and would be phased in at 1 percent per year beginning in 1988. Like the insurance premium, the accumulation of this minimum capital would be a new expense. For banks that are currently in financial difficulty, federal payments would, in effect, fully fund the minimum capital requirement. Therefore, imposition of minimum capital requirements would increase the cost of H.R. 3030 by approximately $1.3 billion.

Finally, the House bill authorizes the creation of a secondary market for agricultural debt. As discussed earlier, a secondary market would not be able to offer competitive rates of interest and would therefore have limited impact on the FCS. Not only would the secondary market be unlikely to generate very much business, but the FCS would benefit from it to the extent that it was able to reduce its operating expenses (in proportion to any loss of business) and was paid fees for servicing the debt it sold to the secondary market. Since the secondary market would be somewhat apart from the FCS, it is not clear whether the system would receive any income generated by the secondary market. If the FCS did benefit from fees charged for credit enhancement, the secondary market could improve the financial standing of the FCS. In summary, this study found that the secondary market would neither increase nor decrease the cost of the FCS assistance package by more than $50 million through 1992.

Summary of S. 1665

Because the funding mechanism for S. 1665 differs so greatly from that of the House bill, the comparison of the two bills is not straightforward. The following discussion deals with the value of bonds that would be needed to cover losses, and the expected interest cost associated with those bonds. These costs are summarized in Table 7.

The Senate plan would provide federal assistance through a rather complicated process. First, an institution requiring assistance would apply to the Assistance Board for certification of need. Second, if certification was granted, the ailing lender would be allowed to issue preferred stock. Third, this stock would be sold to the Financial Assistance Corporation, which would raise the capital needed to purchase the stock by selling uncollateralized FCS bonds backed by a government guarantee. Finally, the government would provide direct assistance to the FCS based on the amount of interest due on the uncollateralized bonds. Based on a determination by the Office of Management and Budget, only the direct assistance (and not the value of the guaranteed bonds) would be scored as government outlays.

Again, before legislation, the base cost is $2.8 billion. The study assumes that the explicit federal guarantee allows the uncollateralized bonds to trade at rates 0.1 percent above Treasury bond rates (a premium of 10 basis points). The CBO baseline projection for 15-year Treasury bonds was used to estimate the interest rate on the special FCS bonds.

The first legislative cost considered is the reversal of previous assessments. Unlike the House bill, the Senate would reverse only those assessments imposed by the Capital Corporation during the third quarter of 1986--a total of $122 million. Since some banks that are now in need of financial assistance would benefit from the reversal of these assessments, the total capital shortfall declines by about $50 million.

TABLE 7. SUMMARY OF ESTIMATED COSTS OF ASSISTING THE FARM CREDIT SYSTEM VIA S. 1665
(Total for fiscal years 1988-1992, in billions of dollars)

	Estimate	
	Bonds	Interest
Base Case--No Additional Legislative Requirements	2.8	n.a.
With capital corporation assessments reversed	2.7	n.a.
With capital assessment	2.7	n.a.
With preferred stock issued	2.6	0.735
With voting stock issued	2.7	0.760
With borrowers' rights	3.1	0.825
With system restructuring	3.0	0.815
With insurance	3.1	0.820

SOURCE: Congressional Budget Office cost estimates.

NOTE: The first column of figures represents the value of bonds that would have to be sold to meet the requirements imposed by S. 1665. The second column of numbers is an estimate of the total interest payments due on the bonds through fiscal year 1992. n.a. = not applicable.

The next consideration is the one-time assessment to provide money to purchase the preferred stock authorized by S. 1665. This money would be the first source of capital if an institution was unable to service its uncollateralized bonds. The study estimates that this assessment would generate approximately $250 million from the financially sound portions of the FCS. Since only those institutions that could pay without drawing their own capital stock below prescribed levels would be assessed, this provision would not affect the amount of assistance needed.

The FCS would be authorized by S. 1665 to sell preferred stock to the newly created Financial Assistance Corporation (FAC). The FAC would sell uncollateralized bonds to generate the capital to purchase the preferred stock. Authority to issue preferred stock would commence when borrower stock was reduced to 75 percent of its par value. Because a portion of borrower stock would be drawn down, the volume of bonds needed to be sold would be less than if the full capital shortfall had to be covered (as was the case in the House bill). The study estimates that selling uncollateralized bonds would generate $735 million in interest expenses (and therefore budgetary expenses) on bond sales of $2,600 million through 1992.

The Senate bill would require all borrowers to purchase voting stock in their institutions. This bill would also authorize the use of origination fees and allow the FCS greater discretion in defining the amount (if any) of borrower stock that would have to be purchased. This study assumed that the amount of borrower stock would trend downward over time as more borrowers opted for lower or no borrower stock purchases. Depleting borrower stock would increase interest expenses by $25 million and the amount of noncollateralized bonds issued by nearly $200 million.

The impact of borrowers' rights, system restructuring, and secondary market provisions would be similar to those of the House bill. Borrowers' rights would increase interest payments by $65 million and needed bond sales by nearly $350 million. System restructuring could reduce interest payments by $10 million and bond sales by more than $60 million. The secondary market should have a negligible impact on the cost of S. 1665.

Finally, the imposition of minimum capital requirements and an insurance program would have a much smaller impact on S. 1665 than the comparable programs in H.R. 3030. Since no penalties would be imposed on institutions that failed to meet minimum capital requirements, it was assumed that no additional bonds would be sold to attain them. The insurance program would not start assessing premiums until 1992, when approximately $90 million would be paid as premiums, resulting in an increase of $5 million in interest expenses and $30 million in bond sales.

CHANGES IN POLICY UNDER THE PROPOSED LEGISLATION

Both the House and the Senate bills have the potential to change the structure of the FCS dramatically. For example, the authority to merge different institutions within the system is similar in the two bills and would be expected to have similar consequences. Likewise, both would create a secondary mortgage market for agricultural loans that would probably have comparable results. They differ substantially, however, in the effects they would be likely to have on the FCS.

Probable Impacts of H.R. 3030 on the Farm Credit System

The House bill represents a comprehensive, though expensive, approach to the problems of the Farm Credit System as compared to the Senate bill. Since 1985, the earned surplus of the system has been almost completely depleted. Many institutions within the FCS are able to continue operations only because the Congress has authorized them to use the more liberal Regulatory Accounting Practices to postpone recognition of actual and expected losses. If the FCS is to survive, its capital stock must be replenished. By authorizing expenditures to rebuild the system's capital base, H.R. 3030 makes an explicit commitment to the future of the FCS.

The House bill would reconstitute the system's capital reserves directly through the general fund, and this is a major reason for the bill's relatively high budgetary cost. At least four provisions in H.R.

3030 pertain to rebuilding the capital stock of the FCS. First, the bill would permit farmer-borrowers to reduce their indebtedness by the amount of stock they hold in the system. This would reduce the capital of the system and the volume of its interest-earning assets. Further, this conversion would transfer all of the system's financial problems from the shoulders of the borrowers to those of the taxpayers.

Second, the House bill would allow all Capital Corporation assessments and loss-sharing contributions made during the third quarter of 1986 to be refunded to the institutions making the payments. The Capital Corporation assessments, in particular, were at the center of a controversy over the degree to which financially healthy districts should share in the misfortunes of other districts. To a certain extent, this substitution of public funds for FCS self-help could reduce the strength and meaning of the joint and several liability clause because it would substitute federal assistance for interdependence among parts of the system.

Third, the insurance program that would be established by the act can be seen as prepaid joint and several liability. Since some institutions would not be financially able to pay their insurance premiums during the next several years, taxpayers would be forced to pay for them. Establishing a workable insurance program should, in the long run, reduce the public's exposure to losses by the FCS but at a substantial short-term cost.

Finally, there is the issue of minimum capital requirements. As with the insurance program, there is much to recommend minimum capital requirements from a public policy point of view. If an FCS institution has a solid capital base, it is less likely to be imperiled by a short-term downturn in the agricultural economy. But, as with the insurance program, many institutions within the system would be unable to meet any minimum capital requirements without capital infusions from the government.

Given these efforts to rebuild the system's capital, it is not surprising that the FCS would be more financially sound at the end of five years under the House bill than under the Senate bill. As shown in Table 8, this study estimates total capital, excluding the preferred stock that would be issued under the Senate plan, as being $1.9 billion greater under the House bill by 1992. If borrower-contributed capital is excluded, the difference in capital levels is even more pronounced ($3.5 billion more under H.R. 3030).

Does the system really need this much of a capital cushion? While there is no definitive answer to this question, relatively small changes in the assumptions used in the model result in pronounced increases in the estimated amount of assistance needed. This suggests that the financial condition of the system is still delicate. If a political judgment is made that the FCS deserves federal assistance, and if the Congress wants to place this issue behind it for the foreseeable future,

TABLE 8. A COMPARISON OF THE PROJECTED FINANCIAL CONDITION OF THE FCS UNDER H.R. 3030, AND UNDER S. 1665 (In billions of dollars)

	H.R. 3030	S. 1665
Cumulative GAAP Shortfall	6.2 a/	3.3
Cumulative Assistance	6.2	3.1 b/
Total Capital	6.2	4.3 c/
Total Earned Surplus	6.2	2.8
Insurance Reserve	0.4	0.1
Net Interest Income--1992	1.1	1.3

SOURCE: Congressional Budget Office cost estimates.

a. Includes minimum capital requirements.

b. Uncollateralized bond sales.

c. Excludes preferred stock.

a larger capital stock would be in order. This alternative must be weighed against the fact that H.R. 3030 would provide an interest-free loan to the system, would exempt borrowers from capital losses, and would reduce the FCS's joint liability for capital shortfalls, all at the expense of the taxpayer.

H.R. 3030 has also been characterized as containing more explicit policy messages: that the system should return to its original mission, and that borrowers from the FCS who are in financial difficulty should be given special dispensation.

During the nineteenth century, agrarian populists were active in demanding an improved supply of capital for agriculture. One of the original purposes of the FCS was to respond to this need by providing farmers with greater control over their supply of credit. H.R. 3030 seeks to increase borrower control over credit by increasing the power and responsibility of the local associations.

It is clear that the distribution of decisionmaking power would be rearranged by enactment of H.R. 3030. Less certain is the degree to which farmer control over the supply of credit would be enhanced. One issue is what sort of relationship would develop between the Farm Credit Administration, the system's regulator, and the local associations. Some fear that the FCA might dominate such a relationship, thereby diminishing the true extent of local control. A second question is whether or not the local associations would have sufficient expertise to manage their fund-raising responsibilities (in national capital markets) and their lending activities. If local associations are ill-equipped to deal with both of these activities simultaneously, the probability that they would fail would be increased by H.R. 3030. Finally, there is some danger that the unity of the system could be undermined by the effort to increase local control.

Part of the motivation behind H.R. 3030 is the desire to provide assistance to farmers experiencing financial stress. However, as discussed in an earlier chapter, a number of questions arise as to the equity of requiring the FCS to behave in a certain way toward financially stressed borrowers while allowing competing lenders to abide by a different set of rules. These provisions are likely to put the FCS at a competitive disadvantage to other lenders and to increase the amount of federal assistance required to return the system to financial health.

Moreover, some of the benefits offered by H.R. 3030 are already available to all agricultural borrowers through Chapter 12 of the federal bankruptcy statutes.

Probable Impacts of S. 1665 on the Farm Credit System

The Senate bill has the same general policy goals as the House bill but places much greater priority on minimizing the budgetary impact of the legislation. The most prominent example of this priority is the nature of the funding mechanism employed by S. 1665. To generate funds for financially stressed institutions, the Senate bill would allow the FCS to issue bonds backed by a federal government guarantee and approximately $250 million of system capital. By structuring the assistance in this way, it would move up to $4.0 billion worth of bonds off the budget--so that only payments equal to the amount of interest due on the bonds would be counted as federal outlays.

Another example of the effort to minimize budgetary exposure is the requirement that the FCS use one-quarter of the existing stock of borrower capital before assistance begins--as compared to the House bill, which would commence assistance as soon as the value of borrower stock fell below par. In both bills all existing stock would be guaranteed to be redeemed at par. By delaying the initiation of assistance, the Senate bill could change the amount of assistance needed to redeem this guaranteed stock. For example, if the financial condition of the FCS improved, more system capital would be used to pay off borrower capital.

Finally, the Senate bill would be much less active in rebuilding the system's depleted capital stocks. Assistance would not be provided by S. 1665 to enable system institutions to attain prescribed minimum capital levels. In addition, the insurance program defined in the Senate bill would not begin to collect premiums until 1992. As noted above, the FCS is projected to have a much smaller capital stock in 1992 under the Senate bill than under the House bill. The Senate's approach represents an implicit belief that the worst is behind the FCS, so that federal assistance would serve as a bridge to better financial times rather than being a major recapitalization effort.

While S. 1665 would have a substantially smaller impact on the budget than would H.R. 3030, their effect on national capital markets would be more similar. The Senate bill is estimated to increase federal expenditures by approximately $0.8 billion between enactment and 1992, but would withdraw an expected $3.1 billion of capital from national bond markets. The House bill is estimated to cost the government $6.2 billion over the same time period and would withdraw this amount of capital from the bond markets. Thus, while the budgetary impact of the House bill is nearly eight times as great as the Senate bill, its draw on the bond markets is only twice as great.

The Senate bill would also have the hidden budgetary impact of diminishing the ability of the federal budget to measure governmental expenditures. The Financial Assistance Corporation and the Assistance Board, to be created by the Senate bill, would sell the uncollateralized bonds and manage the distribution of the capital so generated. Both would be creations of the government and would carry out a function (financial assistance) that is normally a governmental function. Yet they would be nominally a part of the FCS (a private entity). In addition, the system would have an equity share in them, so there is a rationale for keeping their activities off the budget. But there would be no essential difference between the bonds issued by the FAC under the Senate bill and the government bonds that would be sold under the House plan: only the name of the payer would be different. The size of the program's claim on the nation's credit resources would not be changed by moving its costs off the budget. In fact, to the extent that the interest rate paid on the uncollateralized bonds exceeded the government's cost of funds, the program's claim on national resources would actually increase. What would be lost is the accuracy of the budget as a measuring device--a cost that is difficult to quantify but is, nevertheless, important.

CONCLUSION

The causes of the Farm Credit System's financial problems are diverse and complex. Likewise, the legislation designed to aid the system is complex and involves a number of difficult trade-offs. Among the key issues are: How much reform can be demanded of the FCS before it ceases to be a commercial enterprise and becomes an agent of social policy? To what extent can the truly distressing outcomes of foreclosure be mitigated without placing the FCS at a competitive disadvantage relative to other lenders, or creating an incentive for borrowers to become delinquent on their loans? How much emphasis should be placed on forcing the system to make full use of its existing capital as contrasted to building a sufficiently large capital stock to enable it to survive future downturns in the farm economy? The two bills under consideration implicitly represent opposing answers to these questions.

APPENDIX

DESCRIPTION OF THE MODEL

The model of the Farm Credit System used in this analysis is an annual accounting model. Because the financial stress in the system is concentrated in the Federal Land Banks (FLBs) and, to a lesser extent, in the Federal Intermediate Credit Banks (FICBs) and Production Credit Associations (PCAs), these parts are modeled at the district bank level. To generate systemwide measures of financial health, the Banks for Cooperatives (BCs) are modeled as a unit at the national level.

A SIMPLE MATHEMATICAL DERIVATION OF THE MODEL

Actual financial data for the FCS from 1985 and 1986 were used to develop the model. The model generates a simplified income and balance sheet statement using Generally Accepted Accounting Principles (GAAP). The model is based on a system of two equations with two unknowns: system debt and net income. The basic model is solved in the following way. First, system debt is defined by the accounting identity:

$$L = A - z1 - z2$$

where

L = System Debt
A = Total Assets
$z1$ = Earned Surplus
$z2$ = Borrower Capital.

This equation simply says that liabilities are equal to total assets less net worth. Net income is also defined as an accounting identity. Total revenues less total expenses and loan loss provisions equal net income.

$$I = x1 + x2 - x3 - x4 - x5$$

where

I = Net income
$x1$ = Interest Income
$x2$ = Other Income
$x3$ = Interest Expense
$x4$ = Operating Expense
$x5$ = Loan Loss Provisions.

Earned surplus in the current period, z1, is equal to earned surplus in the previous period, which will be called z0, plus this period's net income. Furthermore, interest expenses, x3, are equal to the average interest paid, r, times system debt. Substituting these definitions into the two equations yields:

$$L = A - z0 - I - z2$$

$$I = x1 + x2 - rL - x4 - x5.$$

Substituting the new definition for I into the equation for L and solving for L, we get:

$$L = (A - z0 - z2 - x1 - x2 + x4 + x5)/(1 - r).$$

Variations of this equation are used throughout the modeling process.

DETAILS OF MODEL VARIABLES

In the model, assets are grouped into five components: performing loans, investments and cash, other nonearning assets, nonaccrual loans, and loan loss reserves. Performing loans include the outstanding principal of all loans that are current. The composition of cash and investments is self-explanatory and is an indication of the bank's liquidity. Other nonearning assets include accrued interest receivable on loans, the net value of premises and equipment, other owned property (including acquired properties), and other assets and deferred charges. A loan is placed in the nonaccrual category when interest or principal are 90 days or more past due or if other circumstances place continued repayments in doubt.

Liabilities and capital consist of total system debt, surplus or deficit, and borrower capital. Total system debt includes all system bonds, notes, accrued interest payable, and other liabilities. Surplus or deficit is the system's earned net worth, and borrower capital includes outstanding borrower stock and participation certificates.

Revenue sources in the income statement consist of interest income and income from other sources. Interest income includes returns from performing loans and from investments. Income from other sources includes fees for services and other miscellaneous adjustments. Expenses include interest on bonds and notes, the cost of operations, and provisions for loan losses. Finally, there is a line for transfers to or from other system entities. Such transfers would include assessments made by the Capital Corporation or its successor, and loss-sharing assessments.

ASSUMPTIONS APPLIED TO THE INCOME STATEMENT

During the projection period, interest income is based on the level of performing loans and investments, and an assumed interest rate charged by the district. The assumed interest rate charged is based on historical rates and the maintenance of a minimum percentage markup. In the 1990s, a minimum margin of 2 percent above the cost of funds is maintained.

Interest expenses are calculated in two steps. First, the cost of debt that is already on the books of the banks is estimated. This cost is based on an assumed rate of paydown and on the average interest rate on these bonds as calculated by the FCS in data prepared for testimony before the Senate Committee on Agriculture. The interest rate for newly issued bonds is based on the CBO baseline estimate for five-year Treasury bonds plus 25 basis points.

Additions to loan losses are calculated as a percentage of loans outstanding, where the percentage is determined relative to the experience in the most recent historical period. Other income has been relatively stable and is assumed to remain at the average level of 1985 and 1986. Operating expenses are asumed to fall by 5 percent per year in the base case scenario. Finally, it is assumed that no additional transfers of capital are made between system entities.

ASSUMPTIONS APPLIED TO THE BALANCE SHEET

As shown in the mathematical derivation, debt adjusts to balance the books in this model. System debt is a function of the previous period's surplus, current-level total assets, borrower capital, and net income. Borrower capital is set at 10 percent of total loans outstanding for FICB/PCAs and BCs, and at 5 percent for FLBs.

The model's projection of financial conditions in the FCS is driven mainly by the asset side of the balance sheet. Therefore, the assumptions made about these assets are crucially important to the accuracy of the results. Probably the most important and most difficult variable to project is the level of performing loans. Not only is this variable used in the calculation of other model variables, but it is also the largest asset in the balance sheet. The level of performing loans has fallen dramatically in the past two years, and this trend is expected to continue in the near term. In the scenarios to be discussed, different rates of decline and recovery for performing loans are examined.

Recently, the system has increased the amount of cash and investments it holds. In part this increase reflects a decline in farmer demand for debt. In addition, the system has purposely increased its liquidity in order to meet unexpected cash expenses during this period of financial stress. In the projections, the level of investments and cash was assumed to fall substantially from 1987 through 1990 and to stabilize thereafter. Other nonearning assets are assumed to decline by 10 percent per year.

In the model, nonaccrual loans are calculated according to the following accounting identity:

> opening amount of nonaccruals + new amounts - gross charge-offs = closing amount of nonaccruals.

New amounts of nonaccruals are a function of past levels of new nonaccruals and are assumed to decline over time at rates that vary across scenarios. Gross charge-offs measure the amount of a bank's assets that are written off during the period. All or part of a loan may be written off as part of a restructuring, foreclosure, or bankruptcy. The amount charged off in a given period is assumed to be some percentage of the closing level of nonaccruals in the previous period. The precise percentage differs in various scenarios.

Loan loss reserves are also calculated as an accounting identity:

opening amounts - net loss on charge-offs + additions to loan loss reserves = closing amounts.

The net loss on charge-offs is the difference between the book value of an asset that is charged off and the actual amount received for it when it is sold. The net loss is a function of the level of charge-offs during the period, the strength of the asset market, and the priority of the FCS relative to other creditors with an interest in the asset in question. In the model, it is assumed that asset markets strengthen during the period so that net losses on charge-offs stabilize at 25 percent of gross charge-offs. Additions to loan losses during the projection decline at varying rates from the average additions to loan losses in 1985 and 1986.

Details about the specific assumptions employed for the variables in the model in each of the three scenarios considered are summarized in Tables A-1, A-2, and A-3. A sample of the output produced by the model is presented in Table A-4. The results in A-4 are for a projection using the most likely assumptions for the pre-legislation case. Only system totals are included in Table A-4.

TABLE A-1. PROJECTED FINANCIAL STATEMENTS: MOST LIKELY ASSUMPTIONS

	1987	1988	1989	1990	1991	1992
Performing loans (percent change from previous year)	a/	a/	0	5	5	5
Investments (percent change from previous year)	-25	-25	-25	0	0	0
New nonaccrual loans (percent change from previous year)	-70	-25	-25	25	0	0
Charge-offs (percent of opening nonaccruals)	40	40	40	30	30	30
Net loss on charge-offs (percent of gross charge-offs)	50	25	25	25	25	25
Addition to loan-loss allowance (percent change from previous year)	b/	0	5	5	5	5
Interest charged (percent change from previous year unless otherwise stated)	0	-2.5	0	2 percent above cost	2 percent above cost	2 percent above cost

SOURCE: Congressional Budget Office projections from an annual accounting model.

NOTE: Nonearning assets other than performing loans and investments decline by 10 percent per year over the course of the projection. Interest paid on debt is 25 basis points above the five-year interest rate found in the CBO macroeconomic baseline throughout the period. Borrower capital varies from 5 percent to 10 percent of total loans throughout the period.

a. Decline at one-quarter the rate observed during the previous year.

b. One-eighth of the average for 1985 and 1986.

TABLE A-2 PROJECTED FINANCIAL STATEMENTS: OPTIMISTIC ASSUMPTIONS

	1987	1988	1989	1990	1991	1992
Performing loans (percent change from previous year)	a/	0	5	5	5	5
Investments (percent change from previous year)	25	25	25	0	0	0
New nonaccrual loans (percent change from previous year)	75	25	25	25	0	0
Charge-offs (percent of opening nonaccruals)	40	40	30	30	30	30
Net loss on charge-offs (percent of gross charge-offs)	50	25	25	25	25	25
Addition to loan-loss allowance (percent change from previous year)	b/	0	5	5	5	5
Interest charged (percent change from previous year unless otherwise stated)	0	-2.5	0	2 percent above cost	2 percent above cost	2 percent above cost

SOURCE: Congressional Budget Office projections from an annual accounting model.

NOTE: Nonearning assets other than performing loans and investments decline by 10 percent per year over the course of the projection. Interest paid on debt is 50 basis points above the five-year interest rate found in the CBO macroeconomic baseline throughout the period. Borrower capital varies from 5 percent to 10 percent of total loans throughout the period.

a. Decline at one-eighth the rate observed during the previous year.

b. One-eighth of the average for 1985 and 1986.

TABLE A-3. PROJECTED FINANCIAL STATEMENTS: PESSIMISTIC ASSUMPTIONS

	1987	1988	1989	1990	1991	1992
Performing loans (percent change from previous year)	a/	a/	0	2.5	5.0	5.0
Investments (percent change from previous year)	-25	-25	-25	0	0	0
New nonaccrual loans (percent change from previous year)	-65	-25	-25	-25	0	0
Charge-offs (percent of opening nonaccruals)	40	50	40	40	30	30
Net loss on charge-offs (percent of gross charge-offs)	50	25	25	25	25	25
Addition to loan-loss allowance (percent change from previous year)	b/	0	5	5	5	5
Interest charged (percent change from previous year unless otherwise stated)	0	-5	0	2 percent above cost	2 percent above cost	2 percent above cost

SOURCE: Congressional Budget Office projections from an annual accounting model.

NOTE: Nonearning assets other than performing loans and investments decline by 10 percent per year over the course of the projection. Interest paid on debt is 25 basis points above the five-year interest rate found in the CBO macroeconomic baseline throughout the period. Borrower capital varies from 5 percent to 10 percent of total loans throughout the period.

a. Decline at one-half the rate observed during the previous year.

b. One-eighth of the average for 1985 and 1986.

TABLE A-4. PROJECTED FINANCIAL STATEMENTS: BASE CASE, MOST LIKELY ASSUMPTIONS

	1985	1986	1987	1988	1989	1990	1991	1992
Income Statement								
Interest income	9.0	7.2	7.3	6.6	6.3	5.9	5.6	5.4
Other income	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Interest expenses	-7.7	-6.4	-6.5	-5.3	-4.8	-4.3	-4.1	-3.9
Operating expenses	-1.5	-1.1	-1.0	-1.0	-0.9	-0.9	-0.8	-0.8
Provisions for loan losses	-3.0	-1.8	-0.3	-0.3	-0.2	-0.2	-0.3	-0.3
Assistance from (to) system entities	0.3	0.0	0.0	1.2	0.6	0.3	0.3	0.2
Net income	-2.7	-1.9	-0.3	1.5	1.2	1.0	0.9	0.8
Balance Sheet								
Assets								
Performing loans	64.4	51.1	47.8	47.0	47.0	49.3	51.8	54.4
Investments	8.3	11.3	8.5	6.3	4.8	4.8	4.8	4.8
Other nonearning assets	5.6	5.1	4.6	4.1	3.7	3.3	3.0	2.7
Nonaccrual loans	5.4	7.1	5.9	4.8	3.8	3.4	3.1	2.9
Less loan loss reserves	-3.2	-3.6	-2.5	-1.6	-1.2	-1.1	-1.0	-0.9
Total assets	80.5	71.0	64.3	60.7	58.0	59.7	61.6	63.8
Liabilities and Capital								
System debt	72.2	65.3	59.5	54.6	50.8	51.4	52.2	53.4
Surplus or deficit	3.4	1.5	1.2	2.7	3.8	4.8	5.7	6.6
Borrower capital	5.0	4.2	3.6	3.5	3.4	3.5	3.7	3.8
Total capital	8.4	5.6	4.7	6.1	7.2	8.4	9.4	10.4
Total liabilities and capital	80.5	71.0	64.3	60.7	58.0	59.7	61.6	63.8
Cum. GAAP shortfall	n.a.	n.a.	-1.2	-1.8	-2.2	-2.4	-2.6	-2.8
Net GAAP shortfall	n.a.	n.a.	-1.2	-0.6	-0.3	-0.3	-0.2	-0.2

SOURCE: Congressional Budget Office projections from an annual accounting model.

NOTE: n.a. = not applicable.

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